

## Earthquake – Prologue

We hadn't been in bed more than 20 minutes. Lori was softly snoring and I had just drifted off into sleep trying to out snore her. Ker-thump! I was lying on my back on the floor and the house was shaking like it had been hit by a 2 mile long express train. I heard Lori thrown from the bed and her groan as her head hit the night stand on her side of our king sized bed.

It was an earthquake more powerful than any in my experience. It only shook for a minute and I picked myself up and took the flashlight that rolled off my night stand barely missing my head. I turned the flashlight on and it still worked so I moved around the bed.

“Are you alright?”

“I don't know about alright, but I'm conscious. My head hurts.”

“I think you hit the night stand on your way down. I heard you hit and then groan.”

“Are you alright Ben?”

“I landed on my pride so I didn't get hurt. The flashlight came close to beaming me on its way to the floor.”

“I'm woozy.”

“Let me grab an instant ice pack out of the first aid bag for you.”

“I'll slip into jeans and a sweatshirt.”

“Better put on boots while you're at it. There's no telling what kind of debris we'll have.”

“New Madrid?”

“That would be my guess. It's the closest and we're only a short way from Reelfoot Rift.”

We lived along State Route 2134 in Kentucky. The only things of note between us and New Madrid, Missouri were Lake Number 9 and the Mississippi River. We were a few km from the community of New Madrid, line of sight.

“Here's that ice pack. I guess I'd better get dressed too before we get the aftershock.”

For better or worse, we decided we'd be better off in our storm shelter. We had it reconstructed after we bought the place. Kentucky has been known to get a tornado and sometimes an earthquake when the New Madrid Seismic Zone got active.

## Earthquake – Chapter 1 – Before the Fact

The excavator we hired to dig out the old storm shelter and enlarge the hole got a flat rate for showing up and so much per yard of soil moved. Lori and I had the hole made larger... a lot larger. I had him dig 2 holes for 1,000-gallon septic tanks below floor level. One tank was septic and the other was for water. It took a whole weekend to connect the line from the sewage pump to our regular septic tank and run a water line from the well to the second tank. Dad had taught me how to lay block so we wouldn't have to hire that done. I dug the footings and using OSB I sawed, formed up the foundation, leaving a clear space above the tanks for now. Eventually, we'd pour the floor and placed man-hole covers over the access to the water pump and septic pump.

Concrete is a mixture of sand, gravel, water and Portland cement. It can be obtained in three ways: separate dry ingredients that you mix on site, premixed in the sack where you just add water, and ready-mixed from a batch plant and delivered by truck. There is a variation to the latter where you can haul a small amount of ready-mix material using a trailer provided by the batch plant or a rental yard. I chose the latter method and borrowed a 2 yard read-mix trailer from a guy I know.

The foundations were no brainers, dump in the wet concrete, add a board at the end and scrape the concrete level with the top of the form. After the dump and placing the board, I quickly washed out the 2 yard trailer and Lori went back for a second load, etc. Any left-over concrete from leveling the pour went into the bottom of the foundation trench. We did the pours in a single day and went out to dinner to congratulate ourselves for a successful day. The pours also included the tunnel foundations connecting the shelter to the basement

The next day, Sunday, I dug trenches for the septic lines, water lines and electrical conduit. It took from sunup to past sunset, but everything was in place for the floor pour the following Saturday. Monday night I placed the rings around the tank openings for the manhole covers. Tuesday night I ran a line for the diesel fuel for the QD 12.5 along with exhaust lines.

On Wednesday, the blast doors and blast hatch plus the Safe Cell and 2 extra sets of filters arrived from Oregon. Nothing remained to be done until the floor was poured and set up. I ordered in 2 pallets of concrete block, mortar and rebar on Thursday over my lunch hour. I work near Tiptonville, Tennessee as a Ranger at Reelfoot Lake State Park.

On Saturday, they delivered the load of concrete, 12 yards, using the partial yard for the tunnel floor between the storm shelter and basement, this time using the 2x4 forms. There was enough concrete to get halfway from the basement. I calculated it would take 3 weeks plus for the storm shelter walls and a week for the tunnel walls. The thing that slowed me down was the rebar, one horizontal in each layer of block, and one in each block hole when the walls were up. Plus filling the block with premixed concrete.

The I-beams I wanted to use would carry about any load and the support columns were 3½" diameter schedule 40 9' long steel. I planned to put in 2 I-beams running length-wise and support any ¾" plate as a base for the concrete cover. The shelter was 40' long, 30' wide and had a 9' ceiling. The tunnel would be 42" wide and about 12' long. Both the shelter and tunnel would be covered with the scrap ¾" plate followed by 12" of concrete.

The block took a little longer than I thought and I forgot to run a water pipe and drain for the decontamination area before the shelter door, causing a further delay. The only good news was they started the tunnel pour from the basement outwards. While the contractor tacked the ¾" plate into place, Lori and I worked on completing the storm shelter. When the contractor finished up, we settled up and I called the excavator back. I needed a 36" tunnel from the shelter to the detached garage.

"No can do."

"Why?"

"I'd have to dig under the garage slab."

"So can you do it?"

"It will be extra."

"Can you set the 30" concrete culverts into place after you've excavate the extra tunnel?"

"I reckon so, it will be extra."

"You dig and I'll cut the hole in the garage floor. When we're both finished, you can refill the new trench and cover up the storm shelter."

"Looks more like a bomb shelter than a storm shelter."

"We'll, there're storms and then there are storms. Prepare for the worst and hope for the best."

"I suppose you have an armory second to none and food stored for years."

"Not at the moment, but we're working on it."

"Which it?"

"Both."

It seemed like it took forever to accomplish everything on our list. I thought time was on our side. Maybe it was. We had the CBRN equipment from Approved Gas Masks along with several suits, the boots, the tape, the gloves, the MSA Millennium gas masks with MSA ESP II Voice Amplifiers for 6 people and detection strips. Not knowing the life of the filters, we bought 6 dozen spares, at \$50 each. Ouch! Arrow Tech provided the radiation detection equipment and Ham Radio Outlet the amateur communications gear.

We had HF mobile radios for the vehicles, an all band HF-VHF-UHF base station, Business Band Mobiles and portables and a Galaxy SSB CB base station, Cobra 148 GTL SSB mobiles and 40 channel handhelds. Considering the cost of those radio towers, we selected a creosote filled utility pole and had the antennas mounted before the pole was raised into place. We splurged on a 2 year supply for 2 people from Emergency Essentials, a 3 year supply for 2 people from Walton Feed. We filled in what EE lacked by purchasing from Nitro-Pak or other vendors retailing Mountain House pouches. Nitro-Pak also provided the Hungry Man MREs.

Then we stopped to catch our breaths and rebuild our saving accounts. The EE and Nitro-Pak orders arrived shortly after we ordered. Walton said their truck wasn't full. We had two choices, wait for the truck to be fully loaded or pick up the order ourselves. I told them to hold the order; I'd drive up and pick it up.

After I returned from my trip to Idaho, we unloaded and stocked the shelter. Lori suggested buying a side of beef and a hog from the butcher shop. She showed me our bank balance and I told her to go ahead. I'd noticed a box in the basement while I was shuttling the Walton order to the storm shelter. After I finished up, I checked the box more closely. It was a chest freezer, 25ft<sup>3</sup>.

"Did you call the butcher yet?"

"I haven't had time."

"Call him and up the order to a full beef and 2 hogs. We need to load up on frozen vegetables, extra bacon, ham, sausage, butter and anything we can get to fill that new freezer you forgot to mention."

"I really didn't forget. I simply haven't had the time to tell you."

"Ok. I have been on a dead run so I can see that. We're down to the final items... the firearms and QD 12.5."

"Let's do the guns first while we arrange for a fuel tank."

"Ok. Could you call the Cummins dealers in the area and see if one of them has a good used QD 12.5? Either low hours or a rebuilt."

"No problem, you have that list of all the Cummins Distributors. I'll find one."

After I got off work, I stopped by the gunstore. The guy must have seen the look of sheer determination on my face.

“How can I help you?”

“I’m looking for 6 long guns and 4 pistols.”

“Any idea what you might want?”

“Semi-auto except the shotguns. I want pumps. If you don’t have it in stock, how long to get them in?”

“Depends on what it is, but it will likely be 5 days maximum.”

“Works for me. Ok, pistols first; 2 Glock 21SF and 2 Glock 30SF. A total of 5 magazines per pistol, with all the extra being magazines for the 21s. Shotguns; Mossberg 590A1 SPX with the bayonets, 15 round aftermarket slings, 6 round side saddles and 6 round butt cuffs. Rifles next; 2 Springfield Armory M1A Loaded models with Harris bipods and A.R.M.S. mounts supporting Leatherwood Hi-Lux 6-24x50mm M-1200 Rifle Scopes and Burris Red Dot sights plus whatever it takes to mount the backup Burris sights. Finally, 2 Ruger SR-556s. Twenty-five 20-round or 30round magazines per rifle.”

“It’ll take a while to add this up.”

“Give me the blank 4473s and I’ll bring them back when we agree on a package price. I’ll bring my wife since half the firearms are for her.”

“Anything else?”

“Well, I don’t suppose you sell diesel fuel tanks?”

“How big?”

“Twenty thousand.”

“Fourteen thousand do? It’s used but doesn’t leak. It’s a steel aboveground tank.”

“How much?”

“I have no idea. Here’s the guy’s number. He’s in a bad way and really needs the money. I bought all of his firearms and gave him a little extra.”

I paid him \$7,000 or 50¢ per gallon for the tank and had to pay for the transportation. Lori found a QD 12.5 pulled from a wrecked motorhome that had only minor cosmetic

damage and 397 hours on it. We filled out the 4473s after supper and I explained what I'd ordered from the gunstore.

"I'll shop for surplus ammo and keep an eye open for 168gr BTHP match 7.62mm and Mk318 Mod 0 enhanced 5.56mm ammunition (5.56x45mm 62gr BTHP Match cartridge). How about Speer handgun ammo?"

"That's ok with me. Which bullet weight?"

"I think 230gr FMJ and JHP."

"Shotgun shells?"

"If you can handle the recoil, Remington Express Magnum 3" 15-pellet 00 and 41-pellet #4 plus 3" Brenneke Black Magic slugs."

"Have you used the 3" shells before? What's left?"

"The shells have a kick because they're Magnums and I've used them before. All we have left is filling the diesel tank, picking up the genset with extra filters and oil and paying for the guns."

"The meat will be ready for pickup in 4 days. I'll haul it home and get it in the freezer. Then, I'll start working on the extra food we discussed."

"Once we have the biodiesel, we should be able to handle most any storm. There are a few guys in the area producing biodiesel. I'll see what kind of deal I can work on that. The sooner that tank is full, the happier I'll be. The propane company won't let us have a tank larger than that 550. I'm tempted to add a second tank from another dealer. Only thing is, we'd probably have to buy the tank. It would give us enough propane to run the water heater and stove for years."

It sounds like it happened overnight. It didn't, believe me. We used our 20% down payment for the house on the shelter because the VA approved my low interest rate, 0% down loan. That second propane tank was a 1,100-gallon and ran two bucks a gallon plus the propane. I had Ferrellgas fill it.

Most of the writers suggest that beginners get into prepping via the double buying method to accumulate a one year supply of the food one regularly eats. Lori and I agreed to go after the LTS first because she stocked up on sale items we regularly ate. Sooner or later everything you buy from a grocery store will be on sale and you can both make separate purchases each day and not only stock up quick but save a bundle.

## Earthquake – Chapter 2 – After the Fact

There are also the things some claim you can never have too much of. Coffee and or tea, cocoa, canned meats like Spam, corned beef hash, tuna, chicken, beef, bath tissue and feminine hygiene products. I made a note to add a case or two of .22LR ammo, probably 40gr solid points. The only rifle I had was a Winchester 9422LR XTR.

When we were thrown out of bed by the earthquake, we were essentially ready. We'd already used the shelter when we'd gotten tornado warnings and the only thing we changed as a result was to add Oregon Scientific WR602 weather radios; one in the kitchen and one in the bedroom. I carried the bedroom radio when away from home.

As soon we got dressed, we started to empty the refrigerator into laundry baskets and from them into the refrigerator in the shelter. At least 99.9% of the time an earthquake is followed by another shock. An aftershock is a smaller earthquake that occurs after a previous large earthquake, in the same area of the main shock. If an aftershock is larger than the main shock, the aftershock is redesignated as the main shock and the original main shock is redesignated as a foreshock. Aftershocks are formed as the crust around the displaced fault plane adjusts to the effects of the main shock.

I wasn't worried about our utility pole antenna because it had started out as a 120' pole and we'd buried 20' leaving 100' above ground. Typically, 15% of the length is buried. The hole was back filled with soil leaving a flexible pole firmly anchored into the ground. The coffee had just quit dripping when we received the second shock. It was apparently much larger than the first and we started to think the first temblor had been a foreshock.

That was because the shaking was stronger and lasted much longer, close to 3 minutes. The last thing that pops into your head is to check a clock or your watch. If you can get your TV up, someone from the USGS will tell you when the quake started, its magnitude and duration. And, why shouldn't you have TV? Your bill is current; you have standby power, just in case, and enough biodiesel for over a year.

And since we opted for satellite TV, someone is broadcasting somewhere. When it stopped shaking, I turned on the TV. They were reporting the first temblor, it commenced at 11:03:13pm local, had an  $M_w$  (Moment of Magnitude) of 7.2 and duration of 54 seconds. We turned down the volume and just left the TV on.

"You want something to eat?"

"Thanks, no I'm still digesting supper. I think I might lie down and try to get some more rest."

"I'll take the plastic off the bed and we can both try to get a little sleep."

"I'm going to check the blast doors and make sure they'll close without any problem."

“Why wouldn’t they close?”

“Maybe the frames got twisted due to the earthquake.”

“Hog wash; they’re part of the shelter structure not the basement.”

“I’m still going to check. Never assume, it makes...”

“I know the expression and I don’t like you to cuss.”

“They close ok?”

“Yes they did so that means we probably won’t have a nuke war tonight.”

“You have a sick sense of humor. Hush, they’re announcing the second quake.”

*...began at 11:44:51 with an  $M_w$  of 8.1 and duration of 193.5 seconds. The first quake is now considered a precursor to the second quake. The increased intensity and duration had serious effects up and down the Mississippi.*

“What’s the date today?”

“December 15, 2011, why?”

“Hmm, I think I’ll just stay up.”

“Ok, why?”

“On December 16, 1811, the first in a series of 4 large earthquakes occurred right here. The second quake occurred 6 hours after the first. We broke that record. The third quake didn’t happen until January 23, 1812 and it had a lesser intensity, but not by much. The fourth quake occurred on February 7, 1812 and it was the largest, destroying New Madrid and seriously damaging St. Louis.”

“And you believe that history is repeating itself? Get real Ben, it won’t happen like that.”

“We didn’t need a fancy storm shelter either and somehow managed to sit through 6 tornado warnings and one tornado that came close. Besides, I didn’t want Kentucky Thoroughbreds, I wanted Tennessee Walking Horses or Morgans since both will take to harness and saddle. The thing is the Walkers are generally 15 to 17 hands while the Morgans are more compact at 14.1 to 15.2 hands. A big Morgan is the size of a short Walker.”

“Simple when you think about it. Morgan bloodlines were added to refine the Walkers. I’m 5’ 5 and you’re 5’ 8 and I don’t want a horse I can’t see over. Any questions?”



“Color preference?”

“Chestnut.”

“Hang on, here we go again.”

It wasn't an exact repeat of 200 years before. The strong foreshock was of, relatively speaking, short duration. The main shock was powerful and long lasting. Subsequent aftershocks were spaced further apart and successively weaker and shorter. I looked it up.

The modified version of Omori's law, now commonly used, was proposed by Utsu in 1961.

$$n(t) = \frac{k}{(c + t)^p}$$

Where  $p$  modifies the decay rate and typically falls in the range 0.7–1.5.

According to these equations, the rate of aftershocks decreases quickly with time. The rate of aftershocks is proportional to the inverse of time since the mainshock and this relationship can be used to estimate the probability of future aftershock occurrence. Thus whatever the probability of an aftershock are on the first day, the second day will have  $\frac{1}{2}$  the probability of the first day and the tenth day will have approximately  $\frac{1}{10}$  the probability of the first day (when  $p$  is equal to 1). These patterns describe only the statistical behavior of aftershocks; the actual times, numbers and locations of the aftershocks are stochastic, while tending to follow these patterns. As this is an empirical law, values of the parameters are obtained by fitting to data after a mainshock has occurred, and they imply no specific physical mechanism in any given case.

Aftershocks are dangerous because they are usually unpredictable, can be of a large magnitude, and can collapse buildings that are damaged from the main shock. Bigger earthquakes have more and larger aftershocks and the sequences can last for years or even longer, especially when a large event occurs in a seismically quiet area; see, for example, the New Madrid Seismic Zone, where events still follow Omori's law from the main shocks of 1811–1812. An aftershock sequence is deemed to have ended when the rate of seismicity drops back to a background level; i.e., no further decay in the number of events with time can be detected.

Land movement around the New Madrid is reported to be no more than 0.2 mm (0.0079 in) a year, in contrast to the San Andreas Fault which averages up to 37 mm (1.5 in) a year across California. Aftershocks on the San Andreas are now believed to top out at 10 years while earthquakes in New Madrid are considered aftershocks nearly 200 years after the 1812 New Madrid earthquake.

Sorry fella, these quakes weren't some piddley 200 year old aftershock. The main shock matched the earthquake that happened 200 years before. And, that's not a coincidence. Don't really know what it is; but, it's no coincidence. It happening exactly on the same day 200 years later probably is a coincidence. I mean the Myth Busters busted the Myth about the Tesla Earthquake Oscillator, right? I read too much junk. Just between you and me, Tesla was a genius; right up there with Thomas A., Henry (NMI), John D. and Albert (NMI). Got a copy of Albert's FBI file in 14 pdf files. Not so sure about Alexander G. If you need last names, think Edison, Ford, Rockefeller, Einstein and Bell.

Left off Andrew Carnegie he was the 2<sup>nd</sup> richest man in the world, at the time John D. was the richest, and gave most of it away. He was sort of a model for Bill Gates and Warren Buffet.

The subject at hand is the Second big New Madrid Earthquake. There were aftershocks in December of 2011 and January through June of 2012. They sort of petered out. The state of Tennessee had to make some repairs at the Park... nothing extreme.

Our piece of property had been a good buy at the time and didn't have a seismic warning. It probably should have, in retrospect, because you should have seen the house when we came out of the shelter. It was our first clue when the outer blast door wouldn't open and we had to exit via the tunnel to the garage. The garage was only partial destroyed.

The house, on the other hand, didn't have a single door that would open and close. After a door was forced open, it stayed open and was difficult to force closed. Fortunately the main floor hadn't collapsed into the basement. Our first endeavor was to clear the obstruction in front of the blast door and wheel the unloaded chest freezer into the shelter and restock it. Next we moved the double buy short terms supplies to the shelter.

We'd have to have the house demolished and replaced. I'd read about the Farnsworth Method of erecting homes used in Phoenix, Arizona in one of TOM's tall tales and looked into it. What Farnsworth did was erect a masonry exterior and build a frame house inside the exterior. Between our insurance and a FEMA loan, we'd replace our old 3 story with a 2 story Farnsworth home.

Another Ranger, Jake, from Reelfoot Lake State Park loaned us his Airstream travel trailer and after the house was emptied into the patched up garage, the demolition proceeded. Once completed, I cut notches for the I-beams into the front and back basement walls and got the beams in place. Next I laid the row of block using plenty of rebar. Since I'm not much of a carpenter, we hired the framing done using the insurance money.

We specified 2x6 framing for the outer walls and 3" of foam rather than 1". We also had all the 2x6 interior walls sound proofed with R-19 insulation and used solid core wood doors. This house would outlast us and we're relatively young and childless. (Lori had

made a mistake and picked up a STD, gonorrhea. The result of her mistake was the sealing of her fallopian tubes and infertility.)

We had enough insurance money to do a few things differently. With me laying the block, the cost was low and Lori and I agreed to lay 2 layers of block with 72" of separation between the outside of the inner layer and inside of the outer layer. We still had that large pile of dirt from the shelter construction. That gave a high radiation protection factor and a strongly built home. It also had a downside, no windows.

One would think it foolish to essentially erect an aboveground shelter when we already had a well-stocked underground shelter. The inner layer of block was higher than the famed house and I added more I-Beams and had to use heavier beams as they would be unsupported. A contractor supported the I-Beams and welded on more  $\frac{3}{4}$ " plate which added support to the beams. The outer wall was coming up in stages with our adding soil and tamping it every 4 rows of block.

The home had front and back doors and if you moved curtains, you could access the Swiss blast doors. They had been a problem because the wall had to be a minimum of 10" thick of poured concrete. And, did one want the door in the inner wall or outer wall? We used Safe Room's doors on the inner wall and Swiss blast doors on the outer walls. We also installed 2 Safe Cells in the house.

After months of construction, we moved into our new, very secure, home. Despite the construction extras, the fact that I erected all of the block walls left us with a bit of leftover money. Using that money as a down payment, Lori financed a covered corral and had a galvanized grain bin erected along with an open-sided hay shed. I think she's convinced I'm about ready to buy those Morgans.

We talked about it some more and I gave it a lot of thought and decided the horses would come after everything else. There's nothing wrong with her car other than its age. As far as that goes, there's nothing wrong with my 1992 Suburban other than the fact that it came with the 6.5L diesel engine and automatic transmission and 2WD/4WD as original equipment. I've read about guys who'd buy new Rams or Chevy Suburbans and convert them back to the Cummins 6BT engines.

Lori, on the other hand, wasn't about to give up. Christmas, 2012, saw us each receiving Winchester model 92 case hardened Sporters with 24" barrels inside Kirkpatrick scabbards plus Cimarron Pre-War Model P  $4\frac{3}{4}$ " .45 Colt revolvers and western felt hats.

"These are nice. Where are the holsters?"

"Put up with the other firearms I bought."

"What other firearms is that?"

### Earthquake – Chapter 3 – The Trust Fund and the Truth

“Uh, you’ll see when the time comes.”

“Are you saying that you already have them?”

“No, I didn’t say that.”

“Then you don’t have them?”

“I didn’t say that, either.”

“What is it you’re trying to avoid saying?”

“They’re on order and paid for. I got them for dealer wholesale.”

“Ok. And what does ‘them’ consist of?”

“Them consists of a Cimarron Pre-War Model P 7½” .45 Colt revolver and a Cimarron model 1878 Coach gun; plus a Winchester model 1886 short rifle with the same 24” barrel in .45-70 Government in a scabbard. I thought we could choose the gunbelts together.”

“I suppose you have the horses picked out, too?”

“Just a stallion, 3 mares and 2 geldings, all broken to saddle and harness. Chestnuts. That includes the tack. You have me living in a prison cell-house without windows. I need to get out part of the day. I’m going to start a garden this year but all work and no play will make Lori an unhappy girl.”

“First it’s a manmade cave, not a prison. And second how much for the herd?”

“Only \$20,000!”

“Only? What, you have a printing press in the basement I don’t know about?”

“Not exactly; I came into the Trust Fund on my 25<sup>th</sup> birthday. How else could I have afforded the corral, hay shed and grain bin? How else could I have afforded to buy the firearms?”

“You never mentioned it.”

“Neither Mom nor Dad said a word about the Trust. I found out about it while we were rebuilding the house, after my 25<sup>th</sup> birthday. By the way, what did you get me for my 25<sup>th</sup> birthday?”

“I was just so busy at the time, I didn’t get you anything.”

“I’ll settle for a gunbelt. I like the Laredoan Crossdraw.”

“I do too, so let me check the checkbook and see how soon we can order them.”

“Just order them and use the debit card. The Trust was transferred to a savings account which I tied into our checking account.”

I did as Lori suggested although I found it difficult to believe her claim about a Trust Fund. I didn’t really have any say in her use of the Trust Fund since it was established before we’d met. I wanted to go with a cost saving measure, I opting for the plain rigs and not getting the Conchos or hand tooling. We compromised with Conchos, silver plated initial (B and L), basket weaving and no hand tooling.

Everyone had been surprised on November 7<sup>th</sup> when they woke up to learn that Mitt had beaten Barack. Both Florida and Ohio had been close calls and the counting was ongoing when we retired. We had a small Butterball for Thanksgiving and planned on a small Cure 81 for Christmas. We did the gift exchange Christmas Eve and it was a learning experience. So much so that I set out to find out the real story about Lori and her Trust Fund.

One of my fellow Rangers told me the story about how she had been indiscrete believing the 17 year-old and contracting a STD. He said he expected her family to press her to claim rape. They hadn’t and he never knew why. Probably bought off, he suggested.

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Lori was a local gal from Tiptonville and I had relocated to Tiptonville after I got out of college which was after I got out of the Army. We’d met and a romance developed. She told me about the infertility and we got married regardless. Later, we bought the Kentucky property.

There really was a Trust Fund... and she knew about it because she would have had to testify at the trial if the boy’s family hadn’t reached a settlement with her parents concerning the STD that left her infertile. They initially planned to have the boy charged with rape, but her father had talked to his father and they agreed to drop the matter in exchange for money set aside in Trust for her. They boy is now a practicing attorney in Kansas City. It figures.

The boy’s father had funded the Trust with stocks at their market value at the time. The Trust, which was funded for \$50,000 worth of stocks he expected to do poorly, became \$250,000 in those 10 years, despite the stock markets. Lori was rich and I was a Park Ranger, struggling to make ends meet. The savings account was in her name only and we weren’t JTWR0S. Translation: I had to take her word on how much was in the ac-

count. I had access to the funds via the checking account using her debit card, but not mine. You know the 3 numbers on the back of the card...

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She readily admitted the truth when I confronted her with what I'd learned. She asked me not to be mad with her for not telling the truth. I told her I wasn't mad, just disappointed, something I'd get over, and not to worry about it.

We'd never discussed my specialty in the Army. When she asked, I explained that I had been in Iraq during the early years, 2004, and functioned as a Designated Marksman. I carried an upgraded M-14, the M-25. Until recently, Springfield Armory, Inc. sold an M-25 loosely based on the military M-25.

"They don't sell them anymore?"

"They aren't in the 2012 catalog, so I assume not. Springfield Armory, Inc. doesn't sell a combination that would represent my 'heart's desire'."

"What would that be?"

"Maybe I can describe it for you. I'd start with a Super Match rifle with the Douglas 1:10 chrome moly barrel, they're black parkerized. I would have the action glass bedded in a McMillan black M3A cheekrest stock. To round out the package, I'd add a Harris bipod, a NATO Accessory Rail, the OPS, Inc. 2-port muzzle brake, which is threaded and colored to accept an OPS-Inc. 12th Model sound suppressor, the OPS suppressor, a Nightforce NXS 3.5-15x56mm riflescope with the illuminated Mil-Dot Reticle and the Marine Corps AN/PVS-22 UNS. Uh, plus a Springfield Armory leather sling and a BDC ACOG."

"Oh, you would, huh?"

"You asked what my 'heart's desire' rifle was. There's one other that would make a nice addition to the collection, the McMillan Tac-50A1R2 with the following exceptions. First, replace the suppressor with a Jet titanium suppressor and replace the scope with the Nightforce NXS 12-42x56mm riflescope with the illuminated Mil-Dot Reticle. One would have to add the McCann Night Vision Rail to hold the AN/PVS-27 MUNS."

"I suppose that costs more?"

"You've got that right. The ammo is more expensive too, \$5 per round."

That was the end of the subject. We went through shift rotations periodically and some of the times, I got off early because I started early. Timing wise, it couldn't have been better, I helped with the canning. I used block to build a frame to support a countertop that I picked up from Home Depot. I ran a water line and a propane line to the frame

and installed a sink and cooktop in the countertop. This avoided overheating the house. I was working on a septic line and for the moment, used a bucket to drain the sink into.

The garden had outstanding production and we stored 500 pounds of potatoes and 100 pounds of yellow onions, 100 quarts of tomato sauce with onions, garlic and Italian spices. In addition we canned 168 pints of green beans, 42 pints of sliced beets, about 28 quarts each of 3 varieties of pickles, 112 pints of corn, 112 pints of sweet peas, 112 pints of Anaheim chilies and a total of 194 pints of different varieties of squash. We froze one pound vacuum Ziploc bags of mixed green, yellow and red peppers to the tune of 100 pounds.

It was time to refill the freezer and rotate the remaining meat. We bought a side of Black Angus and a whole hog. Extra boneless beef was added to raise the trimmings to 10% fat ground beef. We had the hams cut in half and left the smoked picnics whole. We opted for boneless pork chops and got 4 half racks of baby back ribs. We had the pork tenderloins sliced, pounded out and breaded for tenderloin sandwiches.

Not only that, I got a raise. The taxes didn't take the whole raise, it just seemed like it. Meanwhile, when Lori wasn't canning, she was on the back of one of the horses. At least she was until the 3 mares were with foal and could no longer be ridden. That still left her the stallion and the two geldings. The geldings had been trained together and could be doubled up to pull a wagon or just one used to pull the buggy. Once in a great while, she'd harness both geldings and tie one behind the buggy and have the other pull the buggy to Tiptonville. Before she returned, she'd swap the geldings and have the more rested one pull her home.

Mitt may or may not have been a great Governor. He may or may not have been a great corporate executive. He was a better president than Obama, but that's not saying much. Thanks to Obama he had a good majority in the House and 60 Senate seats, counting the Independents as Democrats. He was focusing on the wrong things and like Dubya, he was focusing hard. Some people call it tunnel vision. That fit Dubya and Mitt to a T.

I got to wondering about my birthday and Christmas. Did Lori have something in mind or was she just curious about the guns I'd like to have. I got some jeans, western shirts, a wide brimmed felt hat and cowboy boots for my birthday. I made a point to remember her birthday this year and reciprocated in the clothing department.

Lori's parents weren't dead, they'd just moved from Tiptonville, Tennessee to Tucson, Arizona. Her mother called from time to time, but not all that often. I never got it clear in my head just what her father did down in Tucson; probably as little as possible. The economy finally began the laborious task of recovering. With us mostly out of Iraq and reducing the troops deployed to Afghanistan the budget was coming more in line with what we could afford. It had a long way to go.

The House had repealed Obamacare and the Senate was locked in a debate. They had been in that debate since they were sworn in. Mitt said it was up to Congress, but he'd **probably** sign the legislation. Remember that Mitt turned around healthcare in Massachusetts. I believe one of the reasons he got elected was his personal stand on abortion. He pulled a lot of the Right to Life voters. I also believe that him standing by his wife when she was diagnosed with multiple sclerosis, helped. That led him to take on the task to take over the troubled 2002 Winter Olympics and Paralympics, to be held in Salt Lake City in Utah, per her urging him to take it, and eager for a new challenge, he did.

He did well and ran for Governor of Massachusetts, winning. Romney sought to bring near-universal health insurance coverage to the state. This came after Staples founder Stemberg told him at the start of his term that doing so would be the best way he could help people, and after the federal government, owing to the rules of Medicaid funding, threatened to cut \$385 million in those payments to Massachusetts if the state did not reduce the number of uninsured recipients of health care services. Although he had not campaigned on the idea of universal health insurance, Romney decided that because people without insurance still received expensive health care, the money spent by the state for such care could be better used to subsidize insurance for the poor.

He signed the resulting Massachusetts health reform law, commonly called Romneycare, which required nearly all Massachusetts residents to buy health insurance coverage or face escalating tax penalties, such as the loss of their personal income tax exemption. The bill also established means-tested state subsidies for people who do not have adequate employer insurance and whose income is below a threshold, with funds that were previously used to compensate for the health costs of the uninsured. He vetoed eight sections of the health care legislation, including a controversial \$295-per-employee assessment on businesses that do not offer health insurance and provisions guaranteeing dental benefits to Medicaid recipients. The legislature overrode all eight vetoes, but the governor's office said the differences were not essential. The law was the first of its kind in the nation and became the signature achievement of Romney's term in office.

Between you and me, I suspect he had hoped that Obamacare would be replaced by Romneycare. It would be a change in name only.

We tended to watch the price of gold and silver as a measure of the strength of the dollar. The dollar was getting stronger because the prices of all precious metals fell, slowly. No, we weren't in the market for gold and silver, at the moment. During mid-2012, it was predicted that the central banks would push gold to \$2,000 by year's end. It didn't happen, although gold and silver did rise. They seemed to be locked into a 55:1 price ratio and that didn't change much.



## Earthquake – Chapter 4 – The New President

Anyway, Romney won the election and was sworn in on January 20, 2013. As mentioned, the House had passed a bill repealing Obamacare and the Senate was locked in debate. The most important result of the Senate having 60 Republican votes pertained to cloture of filibusters.

Those horses were expensive pets. And they were actually nothing more than pets at the moment. Lori had to buy COB and supplements and hay plus straw for bedding. She had to hire a carpenter to build a windbreak on the west side of the covered corral. She also had to keep the horses shod and pay the vet to tend to the pregnant mares. In time, she might actually begin recovering the costs of the horse operation. That was well into the future.

A lot would depend on whether the mares delivered colts or fillies. The more colts she got the more geldings eventually available for sale. Conversely, the more fillies she got, the larger the herd would grow. And, to avoid inbreeding, she'd have to acquire another stallion. With the first six she bought, she paid \$6k for the stallion, \$3k per mare and \$2.5k each for the geldings. Yes, it totals \$20k. It would be 4 years before she began to see any return on her investment. I knew that, just as sure as I am that the sun rises in the east, the horse operation would be a slow starter.

For Christmas 2013, I received a fleece lined drover's coat, a yellow rain slicker, a straw hat and covers for my hats. I had to go to Nashville for class and picked out some underthings from Victoria's Secrets. I also got her a fleece lined Drover's coat and a slicker. She had purchased her own straw hat and covers.

I must say I was disappointed with my Christmas presents. Oh, they were nice enough, no doubt about it. But none of them was 7.62 or .50 caliber. I didn't take into account the typical 9 month wait while the BATFE decides whether or not to issue the tax stamps for the suppressors. Neither did I consider the difficulty of acquiring M118LR ammo nor the fact that Hornady only sold through dealers. I also failed to consider the cost of match grade ammo.

On the other side of the pond, the Eurozone was in trouble. Never mind Greece and their troubles, never mind Spain and their troubles which were worse than Greece; pay attention to Germany's interaction with other members of the European Union. The German's were traditionally conservative and the Chancellor, Angela Merkel, has for several years been described as the world's most powerful woman and as *the de facto leader of the European Union*.

As a female politician from a center right party who is also a scientist, Merkel has been compared by many in the English-language press to former British Prime Minister Margaret Thatcher. Some have referred to her as "Iron Lady", "Iron Girl", and even "The Iron Frau" (all alluding to Thatcher, whose nickname was "The Iron Lady" – Thatcher also has a science degree: an Oxford University degree in chemistry). Political com-

mentators have debated the precise extent to which their agendas are similar. Later in her tenure, Merkel acquired the nickname "Mutti" (a familiar form of 'mother'), said by Der Spiegel to refer to an idealized mother figure from the 1950s and 1960s.

In addition to being the first female German chancellor, the first to represent a Federal Republic of Germany that included the former East Germany (though she was born in the West and moved to the East a few weeks after her birth, when her father decided to return to East Germany as a Lutheran pastor), and the youngest German chancellor since the Second World War, Merkel is also the first born after World War II, and the first chancellor of the Federal Republic with a background in natural sciences. She studied physics; her predecessors studied law, business or history or were military officers, among others.

Merkel was pushing for a resolution to the EU's economic crisis and stepping on more than a few toes. While she remained popular, the party was losing support. She opposed excessive reliance on Russian hydrocarbons, an unpopular stance. Some commentators questioned whether the EU would survive the financial crisis.

I was beyond surprised on my birthday in 2014. Lori presented me with both rifles. She also treated herself to another Morgan stallion from a *different* bloodline. With the 750gr Hornady A-MAX match running \$1,034 per 200 round case plus shipping, she only had 5 cases of .50BMG. On the other hand, she had ~5,000 rounds of XM118LR. It was packed loose in 500-round boxes. The X denotes ammo that Federal is allowed to sell at retail from the Lake City plant because some test rounds in the lot didn't meet specs.

And, if that weren't enough, I was promoted to lead Ranger at Reelfoot Lake State Park. That meant a minor increase in salary which was disproportionate to the increased responsibility. All in all, 2014 was a very good year. The herd had grown by 1 gelding and 2 fillies plus the new stallion. I had both of my 'heart's desire' rifles and some ammo.

Lori was putting in a barn for the horses since the covered corral with the windbreak was less than satisfactory. She had a potential customer for the gelding if it proved out at 4 years of age. She was already doing the training. While the fillies were nothing more than hay burners at their current ages, they bespoke very good long term profits from her hobby.

With the promotion, I didn't have the free time to help with the canning and Lori got a gal from the area to help. Lori paid her a wage and a share of the canned goods. They even expanded the size of the garden to ensure Lori and I got the same share as before. There wasn't any shortage of organic fertilizer with the herd of horses. A composter for the manure had been built and each fall, I was tasked with transferring the compost to the garden and rototilling it in. During the spring, Lori and her hired help, Norma Smart, prepared the garden and did the planting.

Since the big earthquake back 2011, we'd experienced smaller aftershocks with a diminishing frequency. We talked about the new house and I had to agree that I'd overreacted by building an aboveground shelter when we already had an underground shelter. A single story aboveground shelter would have been a bit much, but a two story aboveground shelter was total overkill. With the inner and outer block walls tied together with #4 rebar (1/2") I hoped it was earthquake proof.

Lori told me that the DM rifle I'd described was very expensive and that on the recommendation of the dealer she had selected the Surefire FA762K with the MB762-213F Muzzle Brake / Suppressor Adapter. It cost over \$2,000 installed, plus the tax stamp. The M3A stock, installed ran almost another \$1,000 but they included the bipod installation. The barrel was the Douglas chrome moly parkerized to match the receiver. She purchased 25 CMI 20-round magazines and the specified sights. That was the most expensive part. She found the UNS for \$10,199, a substantial discount over retail. She said the story about the Tac-50A1R2 would have to wait.

When she resumed her tale, she described what acquiring the Tac-50 had entailed. McMillan had supplied the Nightforce NXS 12-42x56mm riflescope with the illuminated Mil-Dot Reticle and the McCann Night Vision Rail to hold the AN/PVS-27. The dealer ordered the Jet suppressor at the same time as he'd ordered the Surefire and, strangely, one stamp arrived a month before the other. She'd bought the Hornady ammo from Cheaper than Dirt, the cheapest source she found.

"Now, do you need anything else?"

"More ammo, but I'll buy it as I save up the money. I'll get both rifles sighted in and shoot them only often enough to avoid my losing my edge. How much did the M118LR cost?"

"A buck a round for a box of 500, packed loose. I was told that Lake City tests each lot of ammo and if a lot contains any non-spec rounds the entire lot is declared seconds and receives the XM designation. XM can be sold to the public. I got that ammo from Lucky Gunner."

"The Hornady was \$52 for a box of 10?"

"Fifty-one seventy-one plus shipping. Different sources though so you'd have to pay separate shipping."

It seemed to me that the Hornady ammo was reaching the price of the Winchester produced Mk211MP and ATK produced M1022. The Mk211MP was illegal since the BATFE classifies it as a destructive device. I didn't know any supply Sergeants, dishonest or otherwise. I'd keep my eyes open, though...

When I'd been in, we'd used M67s and a few of the new LAWs. We generally had 3 colors of smoke, white, green and red. Our rifles had been M4 carbines with the shorter

SOPMOD M203A1 9" 40mm grenade launcher and the grenades were usually HEDP. The carbines were equipped with M68 Close Combat Optics. If we kept the carbines clean and well lubricated with Breakfree CLP, we had few operating problems using up our standard load out of 7 30 round magazines. If they got grungy, we'd use carburetor cleaner to loosen the carbon build up in the gas tube. If we brought extra mags along, as was often the case, we had to lubricate before using those mags. In any event, using more than ten mags was asking for trouble. It hadn't been a big deal because we rarely found ourselves in long firefights.

The Marines had more of the long firefights than we did at places like Fallujah. The second Battle of Fallujah, from what I heard, was the most intense battle since the Battle of Hue back in 1968. I never heard how they made out with their A4s. Our Rugers wouldn't have problems with dirty chambers, unless we added suppressors. What nobody told you was that the suppressor had one downside; they'd dirty your chamber. Bore snakes and a small spray can of CLP became standard equipment to carry with the Rugers. That applied to the M1As and most of the other firearms as well. Cleanliness is next to Godliness and you don't want any weapon to let you down because it needs some CLP.

Where was I? Oh, at home, about halfway between New Madrid and Tiptonville. I had just made an observation about not knowing any supply sergeants because the Hornady ammo cost almost as much as the Mk211MP. The military had developed M1022 because it was ballistically matched to Mk211MP. I wonder if it's available and, if it is, is it any cheaper than the Hornady A-MAX.

The M1022 was loaded by Alliant Techsystems Inc. and I couldn't find it anywhere on the internet. I'm not saying it wasn't there, just that I couldn't find it. For sure I didn't find any Mk211MP, either. I just have to live with the match grade Hornady A-MAX. It could have been worse; we could have lived in California where everything but being gay and having HIV were illegal. Come to think about it, if you were HIV positive, having sex was illegal, I think.

I was able to buy just enough of the 750gr Hornady A-MAX match and M118LR match to keep our ammo inventory at the same level as I had started with. Lori had a new item she could give me for my birthday and Christmas, ammo. One good turn deserves another and I bought her the Mk318 Mod 0 and a small amount of the *Cowboy* calibers.

Let me tell you a little about being a Tennessee State Park Ranger. Tennessee state park rangers wear a variety of hats, so there is not a typical day. Maintenance, resource management, administration, supervision, interpretation, law enforcement, scientific investigation and park patron contact keep me busy as I change hats throughout the day.

As a state employee, I officially work 37.5 hours per week. However, in order to be a successful, service oriented, responsible protector of our natural, cultural and historical resources, I volunteer another twenty to thirty hours a week toward various park activities and projects. I am also the volunteer chairperson of the Tennessee Park Rangers

Association, an organization that prides itself in promoting professionalism, improving communications, upgrading working conditions and supporting active training programs for officers and members of Tennessee State Parks.

I enjoy interpretation, resource management and administrative duties most. Because being a Park Ranger has been my lifelong dream, it is difficult to point out any aspect of the job that I don't dearly love and enjoy except for law enforcement.

As with any job, communication is key to a professionally managed organization. Since there are 54 state parks across Tennessee with more than 200 full-time officers and 60 Seasonal Interpretive Rangers, you can imagine the challenge of maintaining the kind of clear and open communication that enables us to fulfill our system's mission. Thanks to increased technology advancements, training and a cohesive work force, Tennessee State Parks has made great strides toward increasing our communication and maintaining a closely knit "park family".

A four-year degree is required with emphasis placed on those areas specific to natural, cultural and historical resource and park management. Additionally, Park Rangers must complete law enforcement training, first responder medical training, interpretive training and work as a Seasonal Interpretive Ranger. Other training opportunities include fire-fighting, emergency medical technician, high angle rescue and man tracking.

Reelfoot Lake State Park, located in the northwest corner of Tennessee, is one of the greatest hunting and fishing preserves in the nation. The lake encompasses 25,000 acres (15,000 of which are water) and harbors almost every kind of shore and wading bird, as well as the golden and American bald eagles. Other animals are also diverse and abundant here. Its many species of flowering and non-flowering plants attract botany enthusiasts from all over the country. Cypress dominates the margins of the lake, but many other trees and shrubs are also present.

Campgrounds, bathrooms, boardwalk, fishing piers and picnic areas are wheelchair accessible.

Reelfoot's 400-seat, air conditioned auditorium with kitchen facilities is perfect for banquets and conventions. It is available year-round, and rental cost is small. The adjacent Visitor Center houses interesting exhibits pertaining to the natural and cultural history of Reelfoot Lake, and a variety of audio-visual programs. Admission is free. Behind the Visitor Center is the cypress boardwalk nature trail.

Reelfoot Lake features two campgrounds, each having bathhouses with showers. All sites have water and electric hook ups and tables and grills.

The park provides a five-unit motel at the Spillway Area. All spillway units can sleep three people and have a refrigerator, coffee maker and microwave oven. Linens are provided. Three units provide kitchenettes. Pet rooms are available. Credit cards are accepted. Checkout is 11 am CT.

There's a lot to do and see at Reelfoot Lake State Park! Fishing can be done year-round, and there are three different trails to be hiked. There's even an auto tour that circles the lake. There are also a lot of places available for picnicking, including some with play areas for the children and some with fishing piers.

The park's programs (such as the Bald Eagle and Waterfowl Tours, scenic boat tours and more) are also popular activities. While at the park, stop by the R.C. Donaldson Memorial Museum, which features natural and cultural exhibits of the area.

I'd have been better off with more education, but my GI Bill ran out.

## Earthquake – Chapter 5 – The Crash

Various sources claimed that China would become the number one economic power by 2016. Larry Edelson, an American financial advisor living in or near Shanghai, claimed it had happened years before. I first saw the link to The Great Betrayal of 2012 checking gold prices on Kitco. Edelson claimed they surpassed the US several years before. It was a sales pitch for his advisory service, but he made a point.

The seeds had been sown by Dubya and nourished by Barack and Mitt didn't have a chance. Yahoo reported that The International Monetary Fund set the date when China's economy would overtake the US economy, 2016.

I couldn't do anything about it, but I brought it to Lori's attention and because she still had Trust money in the savings account, she signed up and supposedly followed his advice. She started checking the markets and was smiling more often than not. I can't say it was because she was following his advice or doing the opposite. It doesn't matter, whatever she was doing worked. She started to look for more mares and a third stallion.

I sure hoped she didn't decide to buy the Cimarron model P Pre-War .45 Colt 3½" and 5½" barrels. If she did, she'd better buy the leather since she knows our sizes. If things got so bad that we were forced to use single action revolvers and lever action rifles, was there any hope? Real hope?

She had the revolvers and leather bought and put up, along with saddlebags and lariats. She apparently did that when she bought the third stallion and three mares. The mares were already bred by a different stallion, adding further diversity to the horse bloodlines. It was good she had done what she'd done and better that she invested the remaining money in junk silver coins, because... China called the US debt. They had apparently taken lessons from Adlai Stevenson; they were prepared to wait for the money until Hell froze over.

The price of their goods jumped astronomically and we refused to pay their price. They contacted their buddies, the Iranians and they cut off our oil. Venezuela, under its new leader, jumped on the bandwagon. Then, Saudi Arabia refused to increase production. Iran had many of the Middle Eastern countries friendly to the US shaking in their boots after test firing a nuke and *our friends* joined the Saudis. Strangely, Israel didn't attack Iran. And nobody attacked Iran when we had F-22s forward deployed to the region.

Romney ordered that all production from Alaska be delivered to the lower 48 if it wasn't refined in Alaska and retained for Alaska's sole use. He ordered drilling off the California coast under an Executive Order declaring a National Emergency. He also ordered pumping in the Gulf be increased to maximum rates and new wells to be opened as fast as possible. The price of a barrel of oil rose and the price rise justified restarting some previously non-pumping wells. The government contracted with Petrobras for a substantial share of their exports and with Pemex for the same. A portion of the Pemex compensation was debt forgiveness. Petrobras had a new field open and Pemex was de-

veloping a new field. It appeared that fuel would be available, at a much higher price. We also had a recent surge in domestic production from newly developed shale basins. If they'd reverse the rule to shut down those 25% of the coal plants producing electricity, we might just make it.

The LA Times carried an article:

*Never mind that the US economy is about twice the size of China's. More people than ever perceive the Asian giant as the world's dominant economic power, according to a Pew Research Center global survey.*

*The results are believed to reflect popular opinion that the US and Chinese economies are heading in opposite directions.*

*"The global financial crisis and the steady rise of China have led many to declare China the world's economic leader," said the report, which was released Wednesday and also addressed a series of global opinions on the perception of nations and their leaders.*

*For the first time, respondents around the world picked China as the world's leading economy over the US by a margin of 42% to 36%.*

*Asked the same question last year, a median of 41% said the US and only 35% responded China.*

*Even American respondents believed China was ahead with 41% saying China was the leading power and 40% saying the US.*

*Chinese respondents were more sanguine (and realistic) with 48% calling the US the primary economic power and only 29% choosing China.*

*There's ample reason to believe China is ascendant. The country was able to insulate itself from the 2008 financial crisis with minimal exposure to foreign banks. What it lost in trade it made up for with a massive stimulus plan. China is also sitting on a cache of \$3.2 trillion in foreign reserves that many believe it can wield as a financial weapon.*

*But China's path to global dominance is anything but assured, and at the very least, decades off, economists say.*

*In a research note released Thursday, Credit Suisse economist Dong Tao said China's economic model was running out of steam and the country could face weak growth for a prolonged period.*

*Dong said the state's top-down structure is squeezing the private sector – an important cog China will need to elevate its development.*



*“At this moment, China has largely consumed the benefits of previous reforms, and the economy needs a new structural breakthrough,” Dong wrote. “But instead, the leaders in Beijing have followed the example of their western counterparts by ‘printing money’ and spending fiscal dollars.”*

*He continued: “These kinds of stimuli can help ease the pain on slow growth and prevent a hard landing, but are unlikely to generate upward growth momentum and take the economy to a new height, in our view. In fact, it seems that the government spending has crowded out private investment.”*

Meanwhile, the Chinese yuán replaced the dollar as the international money standard. The Euro couldn't because EU had problems nearly as bad as those in the US. And, Lori was raking in money from her investments. I wondered, *did she or didn't she?* Take his advice; she didn't use Summers Eve.

If you think the crash of 2008-2012 was bad, we were recovering when the crash of 2014 came along caused by China calling the debt. When Mitt basically told them to kiss it; the Chinese lay claim to American assets. There was a suggestion that in order to protect those assets they would send troops. The PLA has the largest standing Army in the world at ~2,285,000. However, they also have 10,406,544 males and 9,131,990 females reaching military age annually. The PLA comprises five main service branches, consisting of the PLA Ground Force, PLA Navy (PLAN), PLA Air Force (PLAAF), Second Artillery Corps (strategic missile force), and the PLA Reserve Force.

Chairman Hu Jintao has defined the missions of the PLA as:

- Consolidate the ruling status of the Communist Party
- Help ensure China's sovereignty, territorial integrity, and domestic security in order to continue national development
- Safeguard China's expanding national interests
- Help maintain world peace

The third choice, perhaps? It certainly wasn't the first, second or fourth. Surely the Chinese had planned this and consequently conscripted some of those 19.5 million people that came of draft age into the PLA. Feeding the troops wouldn't be a problem; they could rob Peter to pay Paul. They had probably been accumulating food for some time. And at the same time, producing the equipment and uniforms it took to outfit the new troops. Remember, an army travels on its stomach.

There are seven specialized variants of the QBZ-95.

QBZ-95 (Rifle)

This is the standard version of the rifle used domestically, chambered for the 5.8×42mm DBP87 round.

The PLA has reportedly undertaken a program to improve the Type 95. The lead designer of the Type 95 program Duo Yingxian, who's now retired, has stated that the project is being worked on by some of his students. Known goals for the program are to:

1. Improve the rifle's ergonomics/controls.
2. Chamber it for new ammunition with double the effective range.
3. Add a quick-firing grenade launcher.

#### QBZ-95B (Carbine)

This is a shorter and lighter version of the standard rifle. From pictures seen the QBZ-95B is seen issued only to Naval Officers, possibly due to the limited room in Naval vessels that would prohibit the full length rifle being used in close quarters.

#### QBB-95 LSW (Light Support Weapon)

This light support weapon fulfills the role as the squad machine gunner. It's in the same respect as the QBZ-95 Rifle with modified longer and heavier barrel, higher firing rate, heavier cartridge and is equipped with larger 75-round drum magazine.

#### QBZ-97 (5.56 mm Assault Rifle)

The Chinese have constructed an export version, the QBZ-97, which is similar to the QBZ-95 in all respects except that it is chambered for 5.56 mm NATO instead of the original Chinese 5.8 mm cartridge and has a deep magazine well designed to accept STANAG magazines.

#### QBZ-97A (5.56 mm Assault Rifle)

This variant is a QBZ-97 with the addition of a 3-round burst mode and a bolt hold-open device; it also differs from the QBZ-95 and the QBZ-97 for the shape of its grip, now missing the "front grip" part in front of the trigger guard. This weapon is the only QBZ-95 variant to have seen commercial success and military use outside of China; QBZ-97A rifles are in use by 911 Special Forces of Cambodia Special Operations personnel.

#### QBZ-97B (5.56 mm Carbine)

This is the carbine version of the QBZ-97. The official distributor of the QBZ-97B assault carbine on the international market, Jianshe Industries (Group) Corporation, advertises and sells it under the denomination "5.56mm Short Automatic Rifle Type NQZ03B (97)".

#### QBB-97 LSW (5.56 mm Light Support Weapon)

The light support weapon model of the QBZ-97.

And then, there's the upgrade:

## QBZ-95G

The new QBZ-95G addresses several reliability and ease-of-use issues, and has improved ergonomics:

QBZ-95 variant titled "G" fires the heavier 5.8×42mm round (77gr v. 64gr), with a heavier longer barrel and a redesigned muzzle brake. The twist rate has probably been changed. The "G" variant has an altered butt stock, trigger guard, and a repositioned thumb fire selector switch above the pistol grip. The carrying handle has retained the Chinese quick release mount rail, but also has added the Picatinny rail as a supplement. It had been seen in service in small numbers for testing and evaluation in first quarter of 2010. It has been speculated that this variant entered full service in late 2010, replacing the original QBZ-95 assault rifle introduced into service in 1995. The original QBZ-95 rifles will be handed down to second line and reserve troops, while front line troops receive this variant.

I guess we know where they got the rifles for the new conscripts, huh? They're probably running 3 shifts, 7 days a week cranking out the "G" models. I only say that because Larry Edelson made claims about China's production capacity in his video. And, by the way...

"Are you nuts?"

"What do you mean?"

"I'm talking about spending your remaining money on junk silver."

"Actually, junk silver is worth the silver content of 715 ounces per \$1,000 face value. The difference between uncirculated pre-65 silver and junk pre-65 silver is insignificant. Plus you don't have to pay a minting charge for junk silver, just a tiny premium over the price of silver on the day when you buy it. I'll have you know that silver had slipped up to 60:1 at the time I bought it, so I got a bargain when compared to gold."

I checked. Kitco charged 50¢ an ounce or \$357.50 premium on a \$1,000 face value bag of silver. It wouldn't take much to cover that premium; especially if the dollar became devalued enough that folks had to resort to hard cash. The question was, would China take the gamble. I remember reading a story by Jerry titled *China Gamble*. I'll have to dig it out; I have his CD with several other stories. I'll be darned if I can remember why China gambled.

With the fearful imminent arrival of the PLA, Mitt had to choose his actions carefully lest the Grail Knight say, *He chose poorly*. Naval units were moved from the east coast to the west coast. The remaining vessels on the east coast paled in comparison to the assembled west coast armada. The SSN Virginia, the SSGN Ohio and a trio of 688I class remained with one Carrier Battle Group not Strike Group. The George H. W. Bush had a

full complement including Super Hornets and F-35C aircraft together with the usual complement of other aircraft.

The UN tried to censure China for its unilateral action and Russia and China both vetoed the Security Council Resolution. A formidable force awaited the Chinese ships. Maybe we were no longer the world's strongest economy. We did have a technological advantage, except what the Chinese spies had stolen from us, like the stealth fighter, the J-20.

The Chengdu J-20 (Jian-20) is a purported fifth-generation, stealth, twin-engine fighter aircraft prototype developed by Chengdu Aircraft Industry Group for the Chinese People's Liberation Army Air Force (PLAAF). In late 2010, the J-20 underwent high speed taxiing tests. The J-20 made its first flight on 11 January 2011. General He Weirong, Deputy Commander of the People's Liberation Army Air Force said in November 2009 that he expected the J-20 to be operational in 2017–2019.

The J-20 was one of the stealth fighter programs under the codename J-XX that was launched in the late 1990s. It was designated "Project 718", and won the PLAAF endorsement in a 2008 competition against a Shenyang proposal that was reportedly even larger than J-20. Two prototypes (#2001-01 & #2001-02) have been built as of the end of 2010.

On 22 December 2010, the J-20 was undergoing high speed taxiing tests outside the Chengdu Aircraft Design Institute with no confirmed flight tests. The J-20 made its first flight, which lasted about 15 minutes, on 11 January 2011.

Director of National Intelligence James R. Clapper has testified that the United States has known about the program for a "long time" and that the test flight was not a surprise. On the other hand, a 2012 report by the US-China Economic and Security Review Commission suggests that the United States may have underestimated the speed of development of the J-20 and several other Chinese military development projects.

On 10 May 2012, a new prototype (#2002) was reported to be undergoing low speed taxiing tests in an unspecified airport at Chengdu. This new aircraft (tail number 2002) differs from tail number 2001 with redesigned landing gear and nose.

When the J-20 made its first flight, lasting about 15 minutes, on 11 January 2011, a Chengdu J-10S served as the chase aircraft. After the successful first flight, a ceremony was held. The test pilot of the J-20, Li Gang, Chief designer Yang Wei and General Li Andong (Deputy-Director of General Armaments Department, and Director of Science and Technology Commission of General Armaments Department of the PLA since 2000) attended the ceremony. The jet began making test flights again on 12 November after a month long break from flying.

China thus became the third nation in the world to "develop and test-fly a full-size stealth combat aircraft demonstrator", after the United States and Russia. The Guardian

reported that experts, on the one hand, expressed “surprise” at the speed with which the aircraft was developed, but on the other hand “said the country's military prowess was still relatively backward and way behind that of the US” and that its military interests were limited to its region.

The first test flight coincided with a visit of United States Secretary of Defense Robert Gates to China, and was initially interpreted by Pentagon officials and the media as a possible signal to the visiting delegation from the US. However, after meeting with senior Chinese officials including Chinese President, CMC Chairman Hu Jintao, Secretary Gates remarked, “The civilian leadership seemed surprised by the test and assured me it had nothing to do with my visit.” Jin Canrong, a professor at Renmin University in Beijing who specializes in China-US relations, suggested that President Hu's ignorance of the test raises questions about the nature of civilian control of the Chinese military. However, as Michael Swaine, an expert on the PLA and United States – China military relations, explained, although it's possible and even likely that “senior officials in the [Chinese] leadership did not know that this flight test would occur on this precise day,” this is not necessarily evidence of a military-backed effort to insult Secretary Gates' delegation or embarrass President Hu. Rather, decisions regarding the production, development and testing of such military aircraft are routinely managed by engineers and low-level officials more than by senior civilian or military leadership. Coupled with the fact that there was relatively limited coverage of the event in Chinese media initially, it is likely that the test may not have been considered a significant enough event to warrant notification to President Hu.

A second test flight of an hour and twenty minutes took place on 17 April 2011. On 5 May 2011, a 55 minute test flight included retraction of the landing gear.

The full initial test program of 10 to 20 test flights is expected to take years to complete.

In March 2012 a video was taken of the J-20 showing various tests done in flight.

Do you buy that? Not the J-20, the claims that it will take years of flight testing. Do you believe that Hu didn't know about the test during the Gates visit? If you do, *I've got some oceanfront property in Arizona...* I wonder if they have a carrier version like the F-35C, which is now operational, although in low numbers.

The word is that the sole US Carrier fighters will be the F/A-18E/F Super Hornet and the F-35C Joint Strike Fighter. And no, they still haven't figured out the hypoxia problem with the F-22 Raptor. They've instructed the pilots to not wear their G-suit vests, only the leggings. ABC News reported:

*Pilots for the US Air Force's F-22 Raptor fighter jets have been ordered to take off a portion of their flying suits, specifically the G-suit vest, during routine training missions as the service continues to investigate a rare but mysterious breathing problem some pilots have experienced in the \$420 million-a-pop jets.*

*As a recent ABC News investigation found, in at least 25 cases since 2008 F-22 pilots have reported experiencing symptoms of oxygen deprivation in mid-flight. In one case, a pilot became so disoriented that his plane actually skimmed the tops of trees before he managed to save himself. Another pilot, Capt. Jeff Haney, was killed in a crash after an unexplained malfunction (not true, it is explained) during a training mission in November 2010.*

*Despite grounding the whole \$79 billion fleet of jets for five months last year, the Air Force has been unable to discover the source of the problem.*

*Air Force spokesperson Tadd Scholtis told ABC News today that the G-suit vest, designed to help pilots' bodies cope with extreme G-forces during maneuvers, "appears to be contributing to breathing difficulties" for pilots, but is not believed to be the root cause of the prior incidents. It is being removed, he said, because of some "vulnerability and reliability issues."*

*Last month Defense Secretary Leon Panetta ordered new flight restrictions for the F-22 while the breathing problem remains under investigation, but the Air Force has claimed those orders have not curbed the planes' operations. Panetta also ordered the Air Force to expedite the installation of an automatic emergency backup system; a safety measure that Haney's family told ABC News would have saved his life.*

*The F-22 Raptor, which is made by defense contracting giant Lockheed Martin, officially went combat operational in December 2005 but has yet to see an actual combat mission. From Iraq and Afghanistan to last year's US-led no-fly zone over Libya, the Air Force said it simply has not needed the advanced capabilities of the most expensive jet fighter in history. An amendment to H.R.2266 specifically prohibited the sale of the F-22 to any foreign power.*

*Meanwhile, an Air Force accident investigation board report blames the Nov. 16, 2010, crash of an F-22 Raptor on Capt. Jeff "Bong" Haney – despite a malfunction of the jet's bleed air intakes, which caused an automatic shutdown of multiple aircraft systems including the primary oxygen system.*

*An aircraft's engine bleed air system extracts air from a jet engine's compressor section to generate power and supply gases for an aircraft's life support system, among other systems.*

*The AIB report confirms Air Force Times' Sept. 8 report, in which an industry source and a pilot both said that a bleed air malfunction had caused the crash by shutting down the oxygen system. The AIB, however, places the blame on Haney for not reacting quickly enough to activate the jet's emergency oxygen system or recover from a dive he inadvertently entered into as he struggled to regain his air supply.*

*"I find the cause of the mishap was the MP's [mishap pilot] failure to recognize and initiate a timely dive recovery due to channelized attention, breakdown of visual scan and*

*unrecognized spatial disorientation,” wrote Brig. Gen. James Browne, president of the AIB.*

*The F-22’s On-board Oxygen Generating System, which supplies breathing air to the pilot and has been under investigation for most of the year, did not malfunction and wasn’t a contributing factor, the report said. But the crucial device did shut down because of the bleed-air problem. In September, Air Force Chief of Staff Gen. Norton Schwartz said oxygen had not played any role in the crash.*

*The report notes that “the MP most likely experienced a sense similar to suffocation,” but also rules out hypoxia as contribution factor however despite the shutdown of the oxygen system.*

*“Due to the high affinity of oxygen to hemoglobin, the MP would have had adequate blood oxygen supply after the OBOGS failed,” the AIB report states. “It was concluded that the late recognition of the MA’s [mishap aircraft’s] unusual attitude and appropriate corrective actions attempted by the MP demonstrates that hypoxia was not a factor in this mishap.”*

*A knowledgeable source agreed that Haney would not have fully succumbed to hypoxia, but would have been showing symptoms. Despite what the report says, the source said hypoxia would have played a role even if the pilot had not been rendered unconscious.*

*“The rate at which he descended, though, he would have been at a hypoxia-safe altitude within time to have not fully succumbed to hypoxia and should have only had symptoms versus unconsciousness,” the source said.*

*The environmental control system, air cycle system, On-Board Inert Gas Generating System, cabin pressure and OBOGS were all shut down when the aircraft’s computer shut off the malfunctioning bleed-air system, according to the AIB report. The bleed-air system remains closed in the event of a malfunction to prevent fires.*

*The aircraft’s memory unit showed “partial pressure to the MP’s [mishap pilot] oxygen stopped shortly after 19:42:37 L, which would lead to severely restricted breathing,” the accident report reads.*

*However, Haney did retain enough consciousness to attempt a recovery from a steep dive the aircraft entered into right before the crash. It was too late, however, as the Raptor impacted the ground a scant three seconds later.*

*However, Haney did not manage to active the Emergency Oxygen System to supply him with air, which he needed to do in case the OBOGS shutdown. As the report notes “severely restricted breathing is a physiological symptom which would have prompted the [mishap pilot] to active the EOS.”*

*Pilots have said that the emergency oxygen supply is notoriously difficult to use in the Raptor.*

*The AIB report states that as Haney struggled for air, “he channelized his attention on restoring airflow to his oxygen mask.”*

*As Haney fought to restore his oxygen supply, he inadvertently began to roll the aircraft and his “visual scan” of the aircraft’s instruments and external situation broke down. He entered into a state of “unrecognized spatial disorientation,” according to the AIB report. The aircraft rolled 240 degrees and dropped to a 53 degree nose down attitude. Had Haney not been distracted by trying to breathe, he would have recognized the problem, the report reads. Haney didn’t make any intentional control inputs for some 39 seconds.*

*“The fact that the [mishap pilot] went from a controlled flight regime to an unusual attitude and did not take corrective actions for 30 seconds suggests he had unrecognized spatial disorientation,” the AIB report reads. “At 19:42:24L the [mishap pilot] recognized the [mishap aircraft’s] position and attempted to perform a dive recovery.”*

*Ultimately, the Air Force chose to blame Haney rather than attribute the crash to a malfunctioning bleed-air system and a difficult to use emergency oxygen supply.*

I believe ABC, not the AIB. [Update: They figured it out and fixed it.]

The Russian stealth fighter was the Sukhoi PAK FA T-50. It’s intended to be the successor to the MiG-29 and Su-27 in the Russian inventory and serve as the basis of the Sukhoi/HAL FGFA being developed with India. The T-50 prototype performed its first flight 29 January 2010. Its second flight was on 6 February and third on 12 February 2010. By 31 August 2010, it had made 17 flights and by mid-November, 40 in total. The second T-50 was to start its flight test by the end of 2010, but this was delayed until March 2011.



## Earthquake – Chapter 6 – The Wait

The hardest part was the waiting. Anyone who has ever served knows that. Think about it, China has called the Debt and has *stated they intend to protect their assets*. Every American with a firearm pulled it out and cleaned it. Then they shot up some expensive ammo relearning how to shoot straight. Finally, the search for large quantities of ammo began and large quantities weren't available. On top of that, what was available was very, very expensive.

Had it not been for Lori buying the extra Cowboy guns and a whole lot of ammo, we'd have been up the creek. But she contacted Lucky Gunner and got 10 more cases of M118LR. And, she bought another 2,000 rounds of 750gr Hornady A-MAX match. She still had enough left to buy the junk silver. That woman is so independent, sometimes I just want to... never mind, I don't know if I want to slap her silly or hug her.

When bread hit \$5 a loaf, she bought the Pullman loaf pans and started baking bread. She picked up a used freezer, 25ft<sup>3</sup>, which worked, and filled it with bread flour from Wal-Mart and some yeast. She knew someone in Tiptonville who had a bread recipe that produced loaves like commercial loaves. Lori also bought a used bread slicing machine from a bakery and we could toast the sliced bread.

Missouri has the lowest prices on cigarettes in the US, unless it might be on some Reservations. When the pressure got to me, she drove over the border and picked up a bunch of the \$30 cartons of generics. They weren't Pall Malls but I've had worse. I'd smoked in the service, but couldn't afford it in college and beat the habit. The pressure got so bad, I picked it back up. I had her get non-filters, it was easier to field strip the butts.

After giving it some thought, I bought more concrete block. I erected a 6' high parapet over the house, two layers thick with 18" soil between the layers. It was a classic embattlement with 6' high merlons and 4½' high crenels. Access was by means of an extension ladder that could be pulled up to the roof, collapsed and set aside.

What are the odds of the Chinese making it to the Mississippi? Slim and none, you say? Let's look at that. They have the largest standing army in the world. They have a short stroke gas piston rifle/carbine. They have one or more Aircraft Carriers. Armed with J-20s? STOVL, the same as the F-35B or a carrier version like the F-35C would both work. Their Carrier, the *Shi Lang*, is the Russian built *Varyag* with a takeoff ramp so the F-35B would work just fine. Did they build a J-20B?

Russia had one aircraft carrier, the *Admiral Kuznetsov*. It was equipped with Sukhoi Su-33 (Flanker-D) fighters. Russia intends to add at least 28 Mikoyan MiG-29K (Fulcrum-D) to the fighter complement.

The People's Republic of China is expected to build two nuclear aircraft carriers based on the Project 1143.7 *Ulyanovsk* class design for some of the PLAN future Chinese air-

craft carriers. Project 1143.7 was the first of a class of Soviet nuclear-powered carriers which for the first time would have offered true blue water aviation capability for the Soviet Navy. It would have been 85,000 tons in displacement (more than the older Forrestal-class carriers but smaller than contemporary Nimitz class carriers of the US Navy). *Ulyanovsk* would have been able to carry the full range of fixed-wing carrier aircraft, as opposed to the limited scope in which *Admiral Kuznetsov* launched aircraft, by way of a ski jump. The configuration would have been very similar to US Navy carriers though with the typical Soviet practice of adding anti-ship missile (ASM) and surface-to-air missile (SAM) launchers. Its hull was laid down in 1988, but the project was cancelled at 40% complete along with a sister ship in 1991. Scrapping began on 4 February 1992.

Four acres of Sovereign Chinese territory floating on the sea? Reports stated that two 50,000-60,000 ton Type 089 aircraft carriers based on the *Varyag*, are due to be finished by 2015. Times 3? The word is that they have laid down keels for 2 *Ulyanovsk* class. But, that's just a rumor.

The longer they wait, the better off they'll be and the worse off we'll be. On the other hand, we had more time to prepare, laying in additional foodstuffs, ammunition plus a little of anything and everything. We discussed a better method of accessing the roof; I was adamantly opposed to tunneling down through the soil and installing a pair of blast hatches. We compromised by installing a permanent fire escape ladder capable of being raised and lowered mechanically. It attached to a merlon and one could step through the crenel to access the roof.

And, sometimes, a person just gets lucky. A semi hauling a load of solar panels was involved in a traffic accident and the trailer rolled. The insurance company paid off the claims and advertised the 300w 48v solar panels *As Is* at a very low price. Lori came up with some cash somewhere and acquired 2 full pallets. She had them installed on the south facing barn roof and went shopping for inverter/charge controllers. That search led her right back to the panel vendor. She hired the installation down to the batteries.

The semi hadn't been hauling batteries and we couldn't afford those 2.2v 7,000a submarine batteries. She settled on AGM deep cycle batteries. I'd been paying attention to her spending, mostly out of curiosity. As near as I could tell she'd already spent close to \$300,000 out of the \$250,000 Trust Fund and still wasn't broke. Frankly, I was getting tired of her evasions and half-truths. That was just the way she was, like it or not. Considering those 2 rifles I sure wasn't going to bring it up.

Life may be a bowl of cherries... but cherries have pits. In the time we had left before the presumed Chinese invasion, we did anything and everything possible to prepare. That included food, ammo, fuel, having the well tested once more and laying in a large stock of feed for the horses; and, the cattle and the hogs and the chickens. By the way, we added cattle, hogs and chickens; no rabbits or fish. We could run a trot line on the Ol' Mississippi if we wanted fish. Don't care for rabbit or tree rats.

We must have gotten prepared too soon, nothing happened. Well, that's not entirely true... Romney's plan to fill the gaps in the petroleum supply worked and worked well. We could tell because the gas, diesel, kerosene and propane prices fell. That put more money in our economy and we were closing in on having the largest economy in the world, again.

We got emails from Walton, EE and Nitro-Pak asking if we needed anything; they suddenly had surpluses. Although we didn't REALLY need anything, Lori did an inventory and placed orders with each of the three. Each was running some specials on one thing or another. She also ordered empty pails with the screw on lids, plenty of Mylar bags and Z500 oxygen absorbers. We already had a bag sealer.

Meanwhile, China had production of military equipment cranked up to the limit and was very careful not to expose their activities to our eyes in the sky, the photo-reconnaissance satellites. But, that's not all we had. The Boeing X-37 (also known as the X-37 Orbital Test Vehicle) is an American reusable unmanned spacecraft. It is boosted into space by a rocket, then re-enters Earth's atmosphere and lands as a space plane. The X-37 is operated by the United States Air Force for orbital spaceflight missions intended to demonstrate reusable space technologies. It is a 120%-scaled derivative of the earlier Boeing X-40.

The X-37 began as a NASA project in 1999, before being transferred to the US Department of Defense in 2004. It conducted its first flight as a drop test on 7 April 2006, at Edwards Air Force Base, California. The space plane's first orbital mission, USA-212, was launched on 22 April 2010 using an Atlas V rocket. Its successful return to Earth on 3 December 2010 was the first test of the vehicle's heat shield and hypersonic aerodynamic handling. A second X-37 was launched on 5 March 2011, with the mission designation USA-226; it returned to Earth on 16 June 2012.

In April 2010, the *China Daily* newspaper wrote that the X-37B program raised concerns about an arms race in space, a sentiment that was echoed by China's *Xinhua News Agency*. Tom Burghardt wrote for *Spacedaily.com* that the X-37B could be used as a spy satellite or to deliver weapons from space. The Pentagon has denied claims that the X-37B's mission supports the development of space-based weapons. In January 2012, allegations were made that the X-37B was being used to spy on China's Tiangong-1 space station module. Former US Air Force orbital analyst Brian Weeden later refuted this claim, emphasizing that the different orbits of the two spacecraft precluded any practical surveillance fly-bys.

One thing I could say about being married to a woman who couldn't have children was that our son would never sit on my knee and ask, "What did you do in the war Daddy?" Assuming we were going to have a war. Never assume...

Maybe China didn't have all of their ducks lined up yet. They had 800,000 workers, give or take and a lot of US dollars. As Mitt's plan to solve the petroleum problem gained

momentum, the relationship between the dollar and Euro swapped to the point where a dollar was worth more than the United Kingdom's pound and the Euro. Merkel wouldn't budge, even if it led to another war. Germany had fought 2 World Wars and lost both so she surely couldn't be in a rush for another.

Compared to the Iron Frau, Mitt was a socialist. And we know that by US standards, Mitt was conservative. As the economy in the US turned, the demand for the precision engineered European cars, BMW, Mercedes and Volvo turned giving the European economy a boost. You don't really believe it costs six figures to turn out those cars do you? Really? Well, we just keep our old American/Japanese built vehicles that don't need computers to run. The ironic part was that our EMP-proof engines used mechanical injector systems.

I assume you know the way of the world. Lori was an only child and Daddy's little girl. I do believe that her mother was just as tightly tied to her as her father. She'd call to get ideas for Christmas or birthday presents and usually had the tide turned before the call ended. One year her folks sent a check for 10 grand with a note that it covered our birthdays and Christmas. To quote one of Jerry's character's, "Beef, Beans, Bullets, Bullion, Bunker. Not necessarily in that order."

Works for me, we had two bunkers, beef in the freezer, more in pints and quarts plus freeze dried meat in our STS Food storage. We had bullets and were working on more, especially two particularly hard to find .50BMG rounds. Lori sprang for the next 5 grand and doubled our supply of M118LR. That left us with the .50BMG rounds, explosive devices and rockets. I'm not holding my breath.

"Unless we can come up with the ammo, explosives and rockets, Lori, we're down to maintaining our preps."

"I sure hope so; my savings account is getting very bare."

"We can expand the garden and sell some fresh and canned produce at the Farmer's Market in Tiptonville. If you could find some decent beef roasts we could can beef chunks and or stew; and, if we have enough chicken, do the same with them."

"I could pickle some hard boiled eggs like they have in taverns. They have a decent shelf life and we could add pickled eggs to what we have to offer."

"Now, that sounds good. Keep back a gallon for us; or, were you planning on using a different size jar?"

"Ben, I just hadn't thought about the jars. I do have a recipe for pickled eggs somewhere. If we're going to do that, maybe we should add kosher garlic dills."

"I've only seen them in beer joints and they're usually spicy. The ones I liked the best had those little, hot, red chilies, and mustard seed if I recall correctly. I suppose a gallon

jar would hold about 4 dozen eggs. I'll do a search for pickled eggs and we can try several recipes."

"Who sell gallon jars?"

"Check the internet. Amazon seems to carry one of everything so if they pop up during your search, check them out. Let me give it a shot while I'm looking for recipes."

"I found it at [specialtybottle.com/widemouthcleargallonglassjar128ozwwhitemetallid](http://specialtybottle.com/widemouthcleargallonglassjar128ozwwhitemetallid). I also located a recipe we can work with until we get it right. Ball makes a half gallon wide mouth jar that we can use too. We'll just tack on the price of the jars to the selling price. The recipe I found says to refrigerate one week before you try the eggs. It also mentioned pickling spice. After they're pickled, refrigeration isn't needed. And, all of the recipes suggested using 4 day old eggs for ease of handling."

"I'm thinking that we should have gotten more chickens."

"Let's get a couple of roosters and pen them and the broody hens separately."

"Can you handle that or should I hire someone?"

"I think I can handle it. I'll just get a prefab shed for a hen house and run some wire. They'll be ok after I clip the wings. I heard a couple of Rangers discussing how to do it so I know who to ask."

I talked to one of the Rangers I overheard discussing clipping wings. He referred me to the other Ranger who he had asked how to do it. I went ahead and got a shed, some T posts and chicken wire. Free delivery so I took it. On the way home, I got to thinking about what we had accomplished and concluded that we hadn't done all that bad. We had a few holes and I couldn't think of a way around them. I'm referring to the rockets, hand grenades and specialty .50BMG ammo. But, I suppose a round of A-MAX would get the MZBs just as dead. Plus, I had an idea where I could get the M-80 simulators that they used in boot camp.

I'd read an article on the M-84 Flash Bangs that said the Army was in the process of adopting a multiuse unit that could be refilled. I suspected that a Flash Bag would work as a substitute for an M67. While they were considered less-lethal, they disrupt the OpFor long enough for you to get the drop on them. I think I've been watching too much TV.

I also think it would be Jim Dandy if I could get my hands on the 12 gauge Taser rounds and some FRAG-12s which were available as explosive blast, fragmentation, and HEAP. If you're going to dream, dream big. The Auto Assault-12 (AA-12), originally designed and known as the Atchisson Assault Shotgun, is a shotgun developed in 1972 by Maxwell Atchisson. The current 2005 version has been developed over 18 years since

the patent was sold to Military Police Systems, Inc. The original design was the basis of several later weapons, including the USAS-12 combat shotgun. The weapon is selective fire, operating as a semi-automatic, or in fully automatic mode at 300 rounds per minute. It is fed from either an 8-shell box magazine, or a 20- or 32-shell drum magazine.

The history of the USAS-12 dates from the 1980s vintage designs of Maxwell Atchisson. In about 1989, Gilbert Equipment Co. (USA) decided to bring up the selective fired weapon, broadly based on principles employed in Atchisson shotguns. The design of the new weapon was produced by John Trevor Jr. Since Gilbert Equipment Co. had no manufacturing capabilities, it started to look for possible manufacturers. It turned out that the only maker that agreed to produce this weapon was the South Korean company Daewoo Precision Industries, a part of the high-tech Daewoo conglomerate. Daewoo engineers adapted the new weapon to their manufacturing techniques, and mass production commenced in the early 1990s. This gun sold well to military and security forces of several (unspecified) countries in Asia, and more than 30,000 of USAS-12 shotguns were made by mid-1990s.

During the same timeframe, Gilbert Equipment Co. tried to bring semi-automatic version of USAS-12 to the US market, but the BATF promptly classified this weapon as "having no sporting purpose", so it became a "destructive device" under the US National Firearms Act of 1934. This greatly restricted its civilian use. During the late 1990s, RAMO Defence Co. began to assemble USAS-12 shotguns from Korean and US-made parts for sale on domestic market, but sales of this weapon were limited to government agencies only. Today, this gun is still being manufactured by S&T Daewoo in Korea for Military and Law Enforcement sales only.

Recently, a US firearms manufacturer, Ameetec Arms LLC of Scottsdale, Arizona, has started the manufacture of a USAS-12 semi-automatic clone, called the WM-12; it mainly differs from the USAS-12 by the lack of fixed sights and carrying handle, replaced by a Picatinny Rail. The manufacturer states that the WM-12 is not a Destructive Device, and is thus readily available to civilians. As of January 2008, however, the WM-12 was no longer to be found on Ameetec Arms online catalogs due to the fact that it was discontinued after its initial semi-production run. Only a few WM-12s were actually built using USAS-12 Demilled shotguns.

The semi-automatic version of the original USAS-12 is presently manufactured by DGN Enterprises Inc. near Martinsville, Indiana, under the store front Guns & Ordnance. The new production USAS-12 is still registered as a "destructive device".

Of the various Benelli M series, my choice would be the M3 because it's a combined pump action and semi-auto action. The pump would be handy for using less-lethal rounds. The US Marines Corps adopted the M4 under the nomenclature M1014.

## Earthquake – Chapter 7 – The Wait (Part 2)

We're still waiting, but life must go on so we are keeping a weather eye on the Chinese situation. At the moment that's not the greatest concern. As nearly as we can guess, the Israelis began refining their plans after Iran tested that nuke. There is essentially a news blackout in Israel concerning their next step. They did receive the aircraft they had on order including 15 F-15Is and the first batch of 20 F-35As with modifications and designated F-35I. Israel has expressed its intention to buy a total of 100 F-35Is.

Despite not discussing the aftershocks of the large 2011 earthquake, we had enough to last a lifetime. While many were below 2.5 M, we'd occasionally get a good one between 2.5 and 4.5. The Richter scale is fine for the small quakes because it doesn't lose its accuracy until the magnitude approaches 7. As near as I can tell, the USGS switched to  $M_w$  for all earthquakes. Their websites just use the term magnitude.

As sure as we were that we were totally prepared, we weren't. There is this guy named Murphy who plays by his own set of rules. The ultimate goal is to anticipate Murphy... and that's impossible.

- If anything can go wrong, it will
- If there is a possibility of several things going wrong, the one that will cause the most damage will be the one to go wrong
- If anything just cannot go wrong, it will anyway
- Left to themselves, things tend to go from bad to worse
- If everything seems to be going well, you have obviously overlooked something
- Nature always sides with the hidden flaw
- Mother Nature is a bitch

The Advanced Tactical Fighter (ATF) was a demonstration and validation program undertaken by the United States Air Force to develop a next-generation air superiority fighter to counter emerging worldwide threats, including Soviet Sukhoi Su-27 and Mikoyan MiG-29 fighters under development in the 1980s. Lockheed and Northrop were selected in 1986 to develop the YF-22 and the YF-23 demonstrator aircraft. These aircraft were evaluated in 1991 and the Lockheed YF-22 was selected and later developed into the F-22 Raptor. The YF-23 was stealthier and faster, but less agile than the competition. After a four-year development and evaluation process, the YF-22 was announced the winner in 1991 and entered production as the Lockheed Martin F-22 Raptor.

The US Navy considered using the production version of the ATF as the basis for a replacement to the F-14, but these plans were later canceled. The first YF-23 (serial number 87-0800), Prototype Air Vehicle 1 (PAV-1), was rolled out on 22 June 1990; PAV-1 took its 50-minute maiden flight on 27 August with Alfred "Paul" Metz at the controls. The second YF-23 (serial number 87-0801, PAV-2) made its first flight on 26 October, piloted by Jim Sandberg. The first YF-23 was painted charcoal gray and was nicknamed "Spider" and "Black Widow II", the latter after the Northrop P-61 Black Widow of World War II. It briefly had a red hourglass marking resembling the marking on the underside

of the black widow spider before Northrop management had it removed. The second prototype was painted in two shades of gray and nicknamed "Gray Ghost". As of 2009, the two YF-23 prototypes were museum exhibits.

As we all know, the F-22 was declared the winner of the fly-offs. The stated reason was that the F-22 was more maneuverable. Did that maneuverability have anything to do with the hypoxia problems? The F-23 was sexier looking; I've seen pictures of both. It was built with more off-the-shelf parts reducing the cost. It had a very strange diamond shaped wing. The ultimate cost of the F-22 and the problems experienced with the aircraft led to stopping production at 187 aircraft.

In turn, the military services looked to the Joint Strike Fighter, the F-35, as a solution to its problems. The JSF was less expensive than the F-22 and came in 3 versions. To be able to build it, the US was forced to invite multiple countries to get involved with the program. As long as those countries were our allies, there was no problem.

The Lockheed Martin F-35 Lightning II is a family of single-seat, single-engine, fifth generation multirole fighters under development to perform ground attack, reconnaissance, and air defense missions with stealth capability. The F-35 has three main models; the F-35A is a conventional takeoff and landing variant, the F-35B is a short take off and vertical-landing variant, and the F-35C is a carrier-based variant.

The F-35 is descended from the X-35, the product of the Joint Strike Fighter (JSF) program. JSF development is being principally funded by the United States, with the United Kingdom and other partner governments providing additional funding. The partner nations are either NATO members or close US allies. It is being designed and built by an aerospace industry team led by Lockheed Martin. The F-35 took its first flight on 15 December 2006.

The United States intends to buy a total of 2,443 aircraft to provide the bulk of its tactical airpower for the US Air Force, Marine Corps and Navy over the coming decades. The United Kingdom, Australia, Italy, Canada, Netherlands, Norway, Turkey, Israel and Japan all will equip their air and/or naval forces with the F-35. Since the JSF program had its growing pains, too, does that mean that Israel got the 20 that worked?

If one considers the lessons of history, things have a time and place. Edwards Air Force Base is named after Captain Glen Edwards. In May 1948, he was selected to join the team of test pilots and engineers at Muroc who were then evaluating the Northrop YB-49, the all-jet version of the exotic flying wing bomber. After his first few flights, he was not favorably impressed, confiding to his diary that it was "the darnest airplane I've ever tried to do anything with. Quite uncontrollable at times." Then, on June 5, 1948, he was flying as co-pilot with Major Daniel Forbes when the airplane departed from controlled flight and broke apart in the sky northwest of the base. All five crew members were killed.



The Northrop YB-49 was a prototype jet-powered heavy bomber aircraft developed by Northrop shortly after World War II. Intended for service with the US Air Force, the YB-49 featured a flying wing design. It was a jet-powered development of the earlier, piston-engine Northrop XB-35 and YB-35; the two YB-49s actually built were both converted YB-35 test aircraft. The plane exists, now, and it's called the B-2 Spirit. They had the cart before the horse; fly by wire hadn't been invented yet. Many of the aircraft in the inventory today can only be flown with fly by wire (usually digital computer) systems.

Electronic signaling of the control surfaces was first tested in the 1930s, on the Soviet Tupolev ANT-20. This replaced long runs of mechanical and hydraulic connections with electrical ones.

The first non-experimental aircraft that was designed and flown (in 1958) with a fly-by-wire flight control system was the Avro Canada CF-105 Arrow, a feat not repeated with a production aircraft until Concorde in 1969. This system also included solid-state components and system redundancy, was designed to be integrated with a computerized navigation and automatic search and track radar, was flyable from ground control with data uplink and downlink, and provided artificial feel (feedback) to the pilot.

In the UK, the two seat Avro 707B was flown with a Fairey system with mechanical backup in the early to mid-60s. The program was curtailed when the airframe ran out of flight time. Most fly by wire systems at this time were analog.

The first digital fly-by-wire aircraft without a mechanical backup to take to the air (in 1972) was an F-8 Crusader, which had been modified electronically by the National Aeronautics and Space Administration of the United States as a test aircraft. Control was through a digital computer with three analogue backup channels. In the USSR the Sukhoi T-4 also flew. At about the same time in the United Kingdom a trainer variant of the British Hawker Hunter fighter was modified at the British Royal Aircraft Establishment with fly-by-wire flight controls for the right-seat pilot. This was test-flown, with the left-seat pilot having conventional flight controls for safety reasons, and with the capability for him to override and turn off the fly-by-wire system. It flew in April 1972.

A digital fly-by-wire flight control system is similar to its analog counterpart. However, the signal processing is done by digital computer and the pilot can "fly-via-computer". This also increases the flexibility of the flight control system, since the digital computers can receive input from any aircraft sensor (such as the altimeters and the pitot tubes). This also increases the electronic stability, because the system is less dependent on the values of critical electrical components in an analog controller. The computers sense position and force inputs from pilot controls and aircraft sensors. They solve differential equations to determine the appropriate command signals that move the flight controls to execute the intentions of the pilot.

The programming of the digital computers enabled flight envelope protection. In this aircraft designers precisely tailor an aircraft's handling characteristics, to stay within the overall limits of what is possible given the aerodynamics and structure of the aircraft.

For example, the computer in flight envelope protection mode can try to prevent the aircraft from being handled dangerously by preventing pilots from exceeding preset limits on the aircraft's flight-control envelope, such as those that prevent stalls and spins, and which limit airspeeds and g forces on the airplane. Software can also be included that stabilize the flight-control inputs to avoid pilot-induced oscillations.

Since the flight-control computers continuously “fly” the aircraft, pilot's workloads can be reduced. Also, in military and naval applications, it is now possible to fly military aircraft that have relaxed stability. The primary benefit for such aircraft is more maneuverability during combat and training flights and the so-called “carefree handling” because stalling, spinning and other undesirable performances are prevented automatically by the computers.

Digital flight control systems enable inherently unstable combat aircraft, such as the F-117 Nighthawk and the B-2 Spirit flying wing to fly in usable and safe manners. Those computers rely on data from sensors and if the data is wrong, the computers can make incorrect decisions. That's why a B-2 crashed on Guam.

A person has a lot of free time on their hands when they're waiting. One outlet for the free time is thinking; either in form of contemplation (review) or meditation (reflection). Some of our thinking brought us to the conclusion we'd be far better off having our brass reloaded to original specs, buying reloading components and a lesser amount of finished ammo.

Lori found someone who reloaded and we both went to talk with him. His equipment was Dillon and about one notch down from the top of the line. He could reload all military calibers and most civilian calibers. The opening part of the discussion was which components we should acquire for each caliber. The second part of the discussion pertained to whether or not we should get our own equipment. When he started relating prices, we decided he could reload our ammo. The third part of the discussion pertained to whom we could use if he were unavailable. He had a short list and would define the specific parameters for each load he did for us. We would be required to get the powders, primers and bullets. Any of the people on the list could reload the ammo to the specs he developed.

Robby gave us a list of powders, primers and bullets he'd prefer to use based on the ammo we were using. I asked about the Speer ammo and he said, Speer used a proprietary blended powder that is not available in canister form. The actual propellant charge was decided at loading. He could match it, regardless.

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The Bretton Woods system of monetary management established the rules for commercial and financial relations among the world's major industrial states in the mid-20th century. The Bretton Woods system was the first example of a fully negotiated monetary order intended to govern monetary relations among independent nation-states.

Preparing to rebuild the international economic system as World War II was still raging, 730 delegates from all 44 Allied nations gathered at the Mount Washington Hotel in Bretton Woods, New Hampshire, United States, for the United Nations Monetary and Financial Conference. The delegates deliberated upon and signed the Bretton Woods Agreements during the first three weeks of July 1944.

Setting up a system of rules, institutions, and procedures to regulate the international monetary system, the planners at Bretton Woods established the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD), which today is part of the World Bank Group. These organizations became operational in 1945 after a sufficient number of countries had ratified the agreement.

The chief features of the Bretton Woods system were an obligation for each country to adopt a monetary policy that maintained the exchange rate by tying its currency to the US dollar and the ability of the IMF to bridge temporary imbalances of payments.

On August 15, 1971, the United States unilaterally terminated convertibility of the dollar to gold. This brought the Bretton Woods system to an end and saw the dollar become fiat currency. This action, referred to as the Nixon shock, created the situation in which the United States dollar became a reserve currency used by many states. At the same time, many fixed currencies (such as GBP, for example), also became free floating. It eventually led to the US becoming the number 2 economy in the world... behind the Chinese.

You can't blame Nixon for our problems with the Chinese; him and the New World Order Secretary of State, Kissinger. From my take on history, Ford was a good president who didn't get reelected because he pardoned Nixon. So, we ended up with Jimmy. The only worthwhile thing he did while in office was visit Three-Mile Island and reassure the American public. What would you expect from a nuclear engineer?

Then, we got the last really good president until Mitt was elected in 2012. He wasn't a hot shot actor and only a good governor, but Reagan was a dynamite president. The four bad presidents were Bush, Clinton, Bush and Obama. I held my breath when I voted for Mitt.

"Do you have one of these?"

"No, but I think I've seen a picture. What is it?"

"It's an AA-12."

"You're kidding me!"

"Considering what I paid for it, it had better be the real deal. I bought extra magazines, 32-round drums to go with the 8-round box magazines."

“How much did it cost?”

“Don’t Ask.”

“That much, huh?”

“It uses the 3” magnum shells we bought so all we need to do is buy more.”

“I don’t suppose you found any M67s or some of the Mk211MP did you? I’ve been looking for both plus some M72A7 LAW rockets and some of the M1022 antipersonnel ammo that matches the Mk211MP.”

“You never told me you wanted some. That’s military stuff, right?”

“Yes dear, it is and about as illegal as you can imagine. I wouldn’t mind having about 2,400 rounds each of Mk211MP and M1022. Sixty rockets would be enough unless you could get more. The grenades are packed one per cylinder, 30 cylinders per case. If we were on the roof, we could probably hold off most any attacking force.”

“Until they used a mortar, you mean.”

“A mortar or several other weapons that typical military units have.”

“I’ll check into it... no promises.”

## Earthquake – Chapter 8 – Be Still My Heart

I still don't know if she did or didn't, but she had spent 400 grand and still had most of her Trust. That didn't make sense, so I asked.

"Oh I didn't have all that much left when you pointed out Larry Edelson to me. However, I mostly took his advice except where my woman's intuition told me he was wrong. You have no idea how well I've done and I'm not going to tell you, just in case."

"Just in case what?"

"I don't know, just in case. Oh, I got the rockets, grenades and ammo you wanted. The guy had M-203s and 40mm grenades available but they weren't on your list. And, since I figured you'd shoot up a lot of ammo with an automatic shotgun, I got you more of the Brenneke Black Magic slugs and 3" 15-pellet 00 buck. Did you want FRAG-12s, too?"

"You can get them?"

"Only if I hurry, he's retiring soon."

"He who?"

"A friend of Daddy's; you don't know him."

"Why was he willing to deal with you?"

"I've known him for years and I told him that you had done a tour in the sandbox as a DM and that you had an M-25 and a Tac-50. He was impressed enough that he started looking at his consumables to see what he could charge off. Now that I think about it, I got the impression that the 40mm grenades wouldn't be a problem but the launchers might."

"The M-203 is not a consumable."

"Could we mount them on the SR-556s?"

"Probably. We could get a gunsmith to take a look if we couldn't."

"Do you want me to try and get them?"

"Talk to him and try to get whatever he can turn loose of. You do realize that we have a problem don't you?"

"What problem?"

“There are only two of us. If something were to actually happen, we don’t have the depth to defend our home.”

“Depth?”

“People. In the United States Army, a squad is composed of two fireteams of four soldiers each, as well as a squad leader who is a Staff Sergeant. A Military Police squad is composed of three teams of three. In the United States Marine Corps, a squad is typically composed of three fireteams of four Marines and a squad leader who is typically a Sergeant or Corporal. In the US Air Force Security Forces a squad is made up of three fireteams of 4 members each led by a Senior Airman or Staff Sergeant and either a Staff Sergeant or Tech Sergeant Squad leader. We don’t even have a fire team.”

“And the parapet has 4 sides.”

“Exactly.”

“What can we do?”

“I’ve been talking to some of the other Rangers at Reelfoot Lake State Park about the possibility of them coming here if the crap hits the fan. We don’t have any shortage of shelter space, if it’s needed, nor food. About the only thing we haven’t prepared for is protecting those horses of yours if we had a nuclear war.”

“How could we do that?”

“The guy you hired to build that barn was old fashioned enough that he used 2×12s for siding. You’d have to do two things. First, you’d have to build a second wall and fill the space with soil. Second, you have to double the roof rafters to support the weight of 48” to 72” of soil. With the hay and straw in the loft, you have some protection already. Depending on whom you believe, 48” of soil provides a protection factor of 1,000.”

“I’m not sure I have enough money to get your things and do the barn.”

“We can use rough cut 2×12s and build it ourselves. Surely you must know someone who could sell you some cheap rough cut 2×12s. I could get my fellow Rangers to help with the construction for their buy-in.”

“I have more than enough money doing it that way. How much time do we have?”

“Don’t dawdle.”

“Got ya.”

We dug a trench 6' out from the barn wall and poured a footing with Quikrete. Then, we erected a frame of rough cut 2x6s and nailed rough cut 2x12s on the inside of the wall that we formed. We had to add diagonal braces to every stud to keep the soil from collapsing the wall. The wall was filled with soil that we tamped in place as we went along. The roof was reinforced and 6' of soil added. A tunnel was dug from the barn to the underground shelter via the garage tunnel.

When we had that done, we set about running water and septic for each trailer. Charlie and Don didn't have trailers while Hank and Jake did. They shopped around and picked up two travel trailers that *needed work*. After rehabbing the two trailers, they were set in place, permanently.

Everyone had their duty arms and, as is common in this part of the country, hunting arms. What they needed, but lacked, was a main battle rifle and an assault rifle. They could always get a 20" barrel for their shotguns from the manufacturer or Mossberg in the case of Mossberg and Remington shotguns. Not everyone favored the 3" magnum shotgun shells. Used firearms seemed to be the order of the day and it was an eclectic collection, one DSA STG-58, one standard model M1A, one PTR91K and one Loaded M1A. They did a group buy on the assault rifles, getting 4 new Bushmaster 20" Barrel M16 A3 Type Rifles with the short stroke gas piston with semi-full configuration.

Their ammunition was whatever they could find and a lot of it came from Serbia and Korea in 5.56x45mm and Serbia in 7.62x51mm. The shotgun shells were mostly Federal or Remington and the handgun ammo was universally Speer. The rule of the day was that if you found any ammo, you bought all you could afford, immediately. If you didn't, the vendor would be sold out the next day.

They also purchased M-203s to launch crowd control rounds and Lori has succeeded in getting us a pair for our SR-556s. The grenades weren't crowd control rounds in the sense of non-lethal or less-lethal, but they would sure control a crowd. That ammo was in our storage room in our underground shelter, the first one we built.

We had a moderate after shock today that the USGS said ran 4.6. According to the evening news there wasn't a lot of damage in the area and what we got was near Tip-tonville. Mitt had an announcement scheduled at 9 Eastern, 8 Central and we sat down after supper to listen to the correspondents speculating what he was going to announce. They weren't even close.

*My fellow Americans,*

*As you are aware, our efforts in reversing the oil crisis have been successful. This has led to an overall reversal in our economy and we're getting stronger every day. We have been able to retire a portion of the National Debt held by the People's Republic of China and will continue to do so until we retire it all.*

*The People's Republic of China remains intransigent insisting that the debt be paid in full immediately. They continue to threaten to seize American assets to retire that debt. The Congressional Budget Office estimates that we should have the debt retired in full over the next four years. The Executive Branch agrees with that assessment.*

*Should the People's Republic of China persist in their demands and attempt to seize American property, we will have no recourse except to answer in kind. The US Army Corps of Engineers has indicated that it would require little effort on our part to destroy a major portion of their infrastructure with conventional weapons.*

*The People's Republic of China should consider themselves forewarned that if they attempt to seize any American property our first response will be to destroy a significant portion of their infrastructure using conventional means. Any response to that event will force this country to use any and all means at its disposal in recompense.*

*After careful consideration, my administration has concluded that we have an obligation to warn the American public that a war with China is imminently possible. FEMA has plans for affordable home shelters. The plans were taken from documents produced by the Civil Defense Organization of the 1950s and updated to reflect the reality of a nuclear war during these times considering the weapons available. The documents are available at no cost at your local emergency management agency.*

*One final word to the Chinese and their supporters; the United States has developed several weapon systems beyond anything one might imagine. There exists a real possibility that any speculation you may have heard in the media only exposes the tip of the iceberg. Ignore this information at your own risk.*

*Thank you and God Night.  
God Bless America.*

"Jeezus H. Katy bar the door, here come the Chinese."

"You think that they'll invade?"

"I don't think so. If you were the Chinese and someone took out a major portion of your infrastructure, what would you do?"

"Do we need any other supplies for the shelters?"

"Where would we put them? I expect the guys will be pulling up their trailers tomorrow after work. We'll get them hooked into the water and septic and they'll have to get their own tanks for their built in diesel generators."

"What do they have?"

"One has a Quiet Diesel 10 and the other a Quiet Diesel 12.5."



“What do you think he meant when he said we could destroy a significant portion of their infrastructure with a conventional weapon?”

“I have no idea. However, I seriously doubt he was bluffing because China could easily call his bluff. I can think of a few counter-value targets that would be devastating. For example, Three Gorges Dam is built on an earthquake fault. If we attacked it when the containment basin was full it would have catastrophic consequences. I’m sure there are other alternatives; that one just popped into my mind.”

“But how?”

“Have you ever seen the old movie *Force 10 from Navarone*?”

“No.”

“It was set in WWII and a small force was sent to Yugoslavia to destroy a bridge. They couldn’t accomplish the task until it was pointed out that there was a dam a few miles upstream. They blew the dam with a few hundred pounds of TNT and the water from the bust dam took out the bridge.”

“How could they do that?”

“Water doesn’t compress. If it’s heated or frozen, the volume expands and applying pressure to ice or water vapor returns it to the liquid state.”

Lori and I visited a bit and I got my shower and turned in. She must have stayed up and watched TV until 10:30 as was her wont. The next morning, I got up, got the coffee perking and got a bowl of cereal to go with my toast. I headed for work and turned on the radio to see if anything I needed to know about happened during the night. Every station was carrying a story about a massive earthquake in China that destroyed the Three Gorges Dam.

The estimates of fatalities downstream ran from a few million to several tens of millions. Had the Chinese grabbed the US Embassy and Mitt kept his promise? Apparently not, the USGS National Earthquake Information Center in Golden (NEIC) had reported a precursor to the 7.8  $M_w$  earthquake. At work, all my fellow Rangers could discuss was the earthquake and Mitt’s threat the previous night.

Hank said, “After that speech, I went to Wiki and looked up the worst natural disasters in history. Overall, China has the most including floods, earthquakes and just about everything. Would it be ok if Shelly pulled our trailer up to your place?”

“By all means.”

He was followed by Jake who asked if he could get off early to do the same. I agreed to let him off an hour early. Jake said his wife Norma was busy stocking up on groceries. His main concern was moving their upright freezer. By 2pm, it became apparent that no one was interested in visiting Reelfoot Lake State Park so we went by Jake's and loaded his freezer in a pickup and hauled it to our place, moving it to the basement.

The last person to arrive was Norma who had their Suburban loaded to the gills with groceries. While the four of us hooked in the two travel trailers, our wives unloaded and stored Norma's groceries. Both she and Shelly mentioned that the gun store called and the groups' ammo order had come in. Don and Charlie took off to pick it up.

"All 4 of you have diesel generators; have you made provisions for fuel in case you need it?"

"We went together and pooled our money and bought a used 9,000 gallon tanker trailer. I called the guy we lined up to tow it and told him we needed it delivered to this address. We used PRI-D since that's what TOM recommends. Plus, we had some kerosene added to keep it flowing if it turns cold."

"What do you use in your stoves and hot water heaters?"

"Propane. They should be delivering 550-gallon rental tanks and filling them in the morning," Jake explained.

"Supper will be ready in an hour," Lori announced. "We're having beef and noodles and french bread."

## Earthquake – Chapter 9 – What Happened

Initially China was too busy reacting to the disaster to accuse anyone of destroying the Three Gorges Dam. Geologists and Seismologists from around the globe revealed their findings concerning the earthquake that caused the dam collapse. Nearly every country offered some form of aid. The Chinese rejected the aid in its entirety. Satellites showed the extent of damage that ran all the way from the dam to Shanghai. The estimates of the death toll began to rise and eclipsed the 100 million mark.

*SHANGHAI – For over three decades the Chinese government dismissed warnings from scientists and environmentalists that its Three Gorges Dam – the world's largest – had the potential of becoming one of China's biggest environmental nightmares. But last fall, denial suddenly gave way to reluctant acceptance that the naysayers were right. Chinese officials staged a sudden about-face, acknowledging for the first time that the massive hydroelectric dam, sandwiched between breathtaking cliffs on the Yangtze River in central China, may be triggering landslides, altering entire ecosystems and causing other serious environmental problems – and, by extension, endangering the millions who live in its shadow.*

*Government officials have long defended the \$24-billion project as a major source of renewable power for an energy-hungry nation and as a way to prevent floods downstream. When complete, the dam will generate 18,000 megawatts of power – eight times that of the US's Hoover Dam on the Colorado River. But in September, the government official in charge of the project admitted that Three Gorges held “hidden dangers” that could breed disaster. “We can't lower our guard,” Wang Xiaofeng, who oversees the project for China's State Council, said during a meeting of Chinese scientists and government reps in Chongqing, an independent municipality of around 31 million abutting the dam. “We simply cannot sacrifice the environment in exchange for temporary economic gain.”*

*The comments appeared to confirm what geologists, biologists and environmentalists had been warning about for years: building a massive hydropower dam in an area that is heavily populated, home to threatened animal and plant species, and crossed by geologic fault lines is a recipe for disaster.*

*Among the damage wrought: “There's been a lot less rain, a lot more drought, and the potential for increased disease,” says George Davis, a tropical medicine specialist at The George Washington University (G.W.) Medical Center in Washington, DC, who has worked in the Yangtze River Basin and neighboring provinces for 24 years. “When it comes to environmental change, the implementation of the Three Gorges dam and reservoir is the great granddaddy of all changes.”*

### **Dam Quake**

*When plans for the dam were first approved in 1992, human rights activists voiced concern about the people who would be forced to relocate to make room for it. Inhabited for*

several millennia, the Three Gorges region is now a major part of western China's development boom. To date, the government has ordered some 1.2 million people in two cities and 116 towns clustered on the banks of the Yangtze to be evacuated to other areas before construction, promising them plots of land and small stipends – in some cases as little as 50 yuan, or \$7 a month – as compensation.

Chinese and foreign scientists, meanwhile, warned that the dam could endanger the area's remaining residents. Among their concerns: landslides caused by increased pressure on the surrounding land, a rise in waterborne disease, and a decline in biodiversity. But their words fell on deaf ears. Harnessing the power of the Yangtze has been a goal since Nationalist leader Sun Yat-sen first proposed the idea in 1919. Mao Zedong, the father of China's communist revolution, rhapsodized the dam in a poem. The mega-project could not be realized in his lifetime, however, because the country's resources were exhausted by the economic failures of the Great Leap Forward in the late 1950s and then the social upheaval of the Cultural Revolution from the mid-1960s to the early 1970s. Four decades later, the government resuscitated Mao's plans. The first of the Yangtze's famed gorges – a collection of steep bluffs at a bend in the river – was determined to be the perfect site.

In June 2003, nine years after construction began, the state-owned China Yangtze Three Gorges Development Corporation (CTGPC) filled the reservoir with 445 feet (135 meters) of water, the first of three increments in achieving the eventual depth of 575 feet (175 meters). The result was a narrow lake 410 miles (660 kilometers) long – 60 miles (97 kilometers) longer than Lake Superior – and 3,600 feet (1,100 meters) wide, twice the width of the natural river channel. Scientists' early warnings came true just a month later, when around 700 million cubic feet (20 million cubic meters) of rock slid into the Qinggan River, just two miles (three kilometers) from where it flows into the Yangtze, spawning 65-foot (20-meter) waves that claimed the lives of 14 people. Despite the devastating results, the corporation three years later (in September 2006) raised the water level further – to 512 feet (156 meters). Since then, the area has experienced a series of problems, including dozens of landslides along one 20-mile (32-kilometer) stretch of riverbank. This past November, the ground gave out near the entrance to a railway tunnel in Badong County, near a tributary to the Three Gorges reservoir; 4,000 cubic yards (3,050 cubic meters) of earth and rock tumbled onto a highway. The landslide buried a bus, killing at least 30 people.

Fan Xiao, a geologist at the Bureau of Geological Exploration and Exploitation of Mineral Resources in Sichuan province, near several Yangtze tributaries, says the landslides are directly linked to filling the reservoir. Water first seeps into the loose soil at the base of the area's rocky cliffs, destabilizing the land and making it prone to slides. Then the reservoir water level fluctuates – engineers partially drain the reservoir in summer to accommodate flood waters and raise it again at the end of flood season to generate power – and the abrupt change in water pressure further disturbs the land. In a study published in the Chinese journal *Tropical Geography* in 2003, scholars at Guangzhou's South China Normal University predicted that such tinkering with the water level could trigger activity in 283 landslide-prone areas.

*That is apparently what happened to the 99 villagers of Miaohe, 10 miles (17 kilometers) upstream of the Yangtze, who saw the land behind their homes split into a 655-foot- (200-meter-) wide crack last year, soon after the reservoir water level was lowered for the summer floods. Officials evacuated them to a mountain tunnel where they camped for three months.*

*One of the greatest fears is that the dam may trigger severe earthquakes, because the reservoir sits on two major faults: the Jiuwanxi and the Zigui–Badong. According to Fan, changing the water level strains them. “When you alter the fault line’s mechanical state,” he says, “it can cause fault activity to intensify and induce earthquakes.”*

*Many scientists believe this link between temblors and dams – called reservoir-induced seismicity – may have been what happened at California's Oroville Dam, in the foothills of the Sierra Nevada. The largest earthen dam in the US, it was constructed on an active fault line in the 1950s and filled in 1968. Seven years later, when the reservoir's water supply was restored to full capacity – after engineers lowered it 130 feet (40 meters) for maintenance – the area experienced an unusual series of earthquakes. US Geological Survey seismologists subsequently found a strong link between the quakes and the refilling of the reservoir.*

*The Oroville area was sparsely populated, so little damage was done. But earthquakes have also been connected to past hydropower projects in China, where dams are often located in densely populated and seismically active river basins. Engineers in China blame dams for at least 19 earthquakes over the past five decades, ranging from small tremors to one near Guangdong province's Xinfengjiang Dam in 1962 that registered magnitude 6.1 on the Richter scale – severe enough to topple houses.*

*Surveys show that the Three Gorges region may be next. Chinese Academy of Engineering scholar Li Wangping reports on the CTGPC's Web site that the area registered 822 tremors in the seven months after the September 2006 reservoir-level increase. So far, none have been severe enough to cause serious damage. But by 2009, the dam's water level is set to be raised to its full 575-foot capacity and then lowered about 100 feet (30 meters) during flood season. That increase in water pressure, in water fluctuation and in land covered by the reservoir, Fan says, makes for a “very large possibility” that the situation will worsen.*

*Local news media report that whole villages of people relocated to make room for the dam will have to move a second time because of the landslides and tremors, indicating that officials failed to foresee the full magnitude of the dam's effects. Guangzhou's Southern Weekend late last year reported that villagers in Kaixian County were eager to move again, citing landslides, mudslides and ominous cracks that had appeared in the ground behind their homes. They also hoped that moving might resolve land allocation issues: Some said they received only half of the acreage they had been promised.*

## **Water Displacement**

*The dam is also taking a toll on China's animals and plants. The nation – which sprawls 3.7 million square miles (9.6 million km<sup>2</sup>; the US is 9,826,675 km<sup>2</sup>) – is home to 10 percent of the world's vascular plants (those with stems, roots and leaves) and biologists estimate that half of China's animal and plant species, including the beloved giant panda and the Chinese sturgeon, are found nowhere else in the world. The Three Gorges area alone accounts for 20 percent of Chinese seed plants – more than 6,000 species. Shennongjia, a nature reserve near the dam in Hubei province, is so undisturbed that it is famous for sightings of yeren, or “wild man” – the Chinese equivalent of “Big Foot” – as well as the only slightly more prosaic white monkey.*

*That biodiversity is threatened as the dam floods some habitats, reduces water flow to others, and alters weather patterns. Economic development has spurred deforestation and pollution in surrounding provinces in central China, endangering at least 57 plant species, including the Chinese dove tree and the dawn redwood. The reservoir created by Three Gorges dam threatens to flood the habitats of those species along with over 400 others, says Jianguo Liu, an ecologist at Michigan State University and guest professor at the Chinese Academy of Sciences who has done extensive work on biodiversity in China.*

*The dam further imperils delicate fish populations in the Yangtze. Downstream, near where the river empties into the East China Sea, the land around the Yangtze contains some of the densest clusters of human habitation in the world, and overfishing there has already endangered 25 of the river's 177 unique fish species. According to a 2003 letter to Science by Wuhan University ecologist Ping Xie, many of these fish evolved over time with the Yangtze flood plain. As the dam decreases flooding downstream, it will fragment the network of lakes around the middle as well as lower the Yangtze's water level, making it difficult for the fish to survive. The project has already contributed to the decline of the baiji dolphin, which is so rare that it is considered functionally extinct.*

*The reservoir could also break up land bridges into small islands, isolating clusters of animals and plants. In 1986, Venezuela's Raúl Leoni Dam flooded 1,660 square miles (4,300 square kilometers) of land, creating the vast Lake Guri, along with a scattering of non-submerged land. The nascent islands lost 75 percent of their biological species within 15 years, according to research published in Science.*

*To determine the true toll, the Three Gorges Dam is taking on animal and plant species, Liu says, long-term data is needed, so that decreases in population totals can be compared with natural species fluctuation. But he cautions that many of the dam's effects may not be immediately apparent. The project is altering reproduction patterns, meaning it may already be too late for some plants and animals. “In the short term, you see the species still there, but in the long term you could see [them] disappear,” Liu says. It is here that State Council representative Wang's allusion to “hidden dangers” rings especially true.*

### **Disease and Drought**

*When officials unveiled plans for the dam, they touted its ability to prevent floods downstream. Now, the dam seems to be causing the opposite problem, spurring drought in central and eastern China. In January, the China Daily (the country's largest English-language newspaper) reported that the Yangtze had reached its lowest level in 142 years – stranding dozens of ships along the waterway in Hubei and Jiangxi provinces. An unnamed official with the Yangtze River Water Resources Commission blamed climate change, even as he acknowledged that the dam had reduced the flow volume of the river by 50 percent. To make matters worse, China is now plowing ahead with a controversial \$62-billion scheme to transfer water from the Yangtze to northern China, which is even more parched, through a network of tunnels and canals to be completed by 2050.*

*Meanwhile, at the mouth of the Yangtze residents of Shanghai, China's largest city, are experiencing water shortages. The decreased flow of fresh water also means that salt-water from the East China Sea now creeps farther upstream. This, in turn, seems to be causing a rise in the number of jellyfish, which compete with river fish for food and consume their eggs and larvae, thereby threatening native populations that are already dwindling as a result of overfishing. In 2004, a year after the dam was partially filled, scientists noted a jellyfish species in the Yangtze that had previously only reached the South China Sea.*

*The effects of the dam's disturbance of whole ecosystems could reverberate for decades. G.W.'s Davis is part of a project researching the disease schistosomiasis (aka snail fever or swimmer's itch), a blood parasite transmitted to humans by snails; people can get it by swimming or wading in contaminated fresh water when infected snails release larvae that can penetrate the skin. (Symptoms include fever, appetite and weight loss, abdominal pain, bloody urine, muscle and joint pain, along with nausea, a persistent cough and diarrhea.) The snails used to breed on small flood plain islands where annual flooding prevented a population explosion. Now, the decreased flow downstream from the dam is allowing the snails to breed unchecked, which has already led to a spike in schistosomiasis cases in some areas.*

*According to Davis, such alterations could precipitate a rise in other microbial water-borne diseases as well. "Once you dramatically change the climate and change water patterns, as is now seen in the Three Gorges region," he says, "you change a lot of environmental variables. Almost all infectious diseases are up for grabs."*

*The official recognition of the dam's dangers suggests that the project's environmental and public health impacts are starting to sink in. Political analysts speculate that President Hu Jintao and Premier Wen Jiabao are eager to distance themselves from a project they inherited. Although halting plans at this point would be an admission of government error, the openness following the Chongqing meeting raised the hopes of worried scientists that officials would take action to minimize the project's environmental and public health fallout.*

Government-funded institutions have been quietly assessing possible recourses. Officials say they've spent more than \$1.6 billion on fortifying landslide-prone areas and will spend an additional \$3.2 billion on water cleanup over the next three years. In January the CTGPC signed a memorandum of understanding with the Nature Conservancy allowing that organization to consult on species protection and river health in the dam area. China's Ministry of Health, meanwhile, is trying to control schistosomiasis infections with a combination of drugs and applications of molluscicides, pesticides that wipe out the disease's snail carriers.

But these measures may not be sufficient to avert disaster. In February China's State Environmental Protection Administration said reservoir water quality targets had not been reached despite a cleanup effort that had been underway since 2001. And fighting schistosomiasis requires a more holistic, multi-pronged approach – particularly now that ecosystems in the Three Gorges region have been altered. To ward off an outbreak, Davis says, the government would have to prevent the use of night soil as fertilizer, build cement irrigation ditches, and ensure area villagers access to clean water. So far, that hasn't happened.

### **Government Oversight**

In the wake of media reports about the government's concerns, officials began to back-pedal. In a November 2007 interview with state news agency Xinhua, State Council's Wang claimed that "no major geological disasters or related casualties" had occurred since the reservoir's water level was raised in 2006; five days later, the earth in Badong crumbled and the railroad tunnel landslide wiped out the bus and its passengers.

Following a brief period of openness, discussion of the dam's environmental effects has once again become largely taboo in China. Government officials fear that continued free discussion of the project's ramifications could lead to civil unrest. One internationally published Chinese scientist working in the Yangtze Basin declined to comment publicly, noting, "This is a very sensitive topic.... I can't give hypotheses."

Despite the Three Gorges dam's growing list of problems, however, hydropower remains an integral – and ostensibly green – component of China's energy mix. China still draws 82 percent of energy from coal, but large dams are crucial to the country's climate change program, which aims to increase its proportion of electricity from renewable resources from the current 7.2 percent to 15 percent by 2020. Over one third of that will come from hydropower – more than from any other source. Twelve new dams are planned for the upper Yangtze alone.

The logistical and environmental hurdles involved in executing these dams underscore China's commitment to hydropower. The Yangtze's newest dams include several smaller projects that are necessary to alleviate sedimentation caused by the Three Gorges reservoir. In his 2007 report to the National People's Congress, Prime Minister Wen Jiabao said that China had relocated 22.9 million people to make room for its large hydro projects.



*China's original goal was to fill the reservoir to its maximum level by 2013. Despite all the trouble, that target was moved up to 2009, Fan says, to boost hydropower output by an additional 2.65 billion kilowatt-hours each year.*

*"For the economic interests and profit of the Three Gorges Project Development Corporation," he says, "that's very important. But the function of any river, including the Yangtze, is not only to produce power. At the very least, [a river] is also important for shipping, alleviating pollution, sustaining species and ecosystems, and maintaining a natural evolutionary balance."*

*"The Yangtze doesn't belong to the Three Gorges Project Development Corporation," Fan adds. "It belongs to all of society."*

## Earthquake – Chapter 10 – The Blame Game

Jake dug that report out of a copy of a 2008 edition of *Science* magazine. He was the educated one with the Master's degree. He'd turned down the promotion that I'd ended up with. The tanker was pulled in and was set in place. Jake and Hank got it hooked up to the 4 Onan Quiet Diesel generators. They also received the 4 propane tanks that were set in place, filled and connected.

Things settled down for a while and everyone was back at their regular jobs. Lori was very busy with the new crop of colts and fillies and Carol, Norma, Shelly and Téa returned to their jobs in Tiptonville. The economy might be recovering but it had a long way to go before two incomes wouldn't be required to support a family. The kids the guys' had were evenly divided, Jake had 2 boys, Tom had 2 girls, Hank 1 girl and Charlie 1 boy.

Jake and Norma's boys were Jacob Jr. 13 and Joseph 12. Hank and Shelly's girl was Trinity 13. Charlie and Carol's son was Charles Jr. 12 but went by Chuck. Tom & Téa's (pronounced TAY-uh) girls were Jillian and Juliet, twins, age 11. They were just average Middle School youngsters except for the twins who were in 6<sup>th</sup> grade. Most of the kids either had a 20 gauge, a .22 or both. All 4 of the older kids hunted with their fathers. Even the twins had been taught firearms safety because Tom had his duty weapons.

Tom said he had a pair of Winchester 9422s in .22LR put up for the twins. I kept waiting for Winchester to reissue the 9422, especially in the XTR. No doubt it would be a cold day in Hell when they did. The XTR models had been the best of the best so far as the lever guns went. They were sold in 4 calibers, .22LR, .22WRM, .30-30 and the .375 Winchester Big Bore. The .375 Winchester is a modernized version of the .38-55 Winchester, a black powder cartridge from the 1880s. It was introduced in 1978 along with the Winchester Model 94 Big Bore lever action rifle. Though very similar in appearance to the parent .38-55, the .375 has a shorter case length and operates at much higher pressures (50,000 cup).

Super-X Power-Point ammunition offers a unique exposed soft nose jacketed bullet design that delivers maximum energy on target. Strategically placed notches around the jacket mouth improve upset performance and ensure uniform expansion for massive energy release. They only sell one load, the 200 grain.

We didn't need them; we had .45-70s already. You remember... that's when I learned of the Trust. And, later, the truth about the Trust. Lori wasn't the most open person when it came to sharing information and it was usually harder than pulling teeth to get to the heart of a matter. On the other hand, it couldn't be said that she wasn't willing to share, as long as it was her making the decisions.

This year when it came time to plant the garden, Lori hired two women to help. She didn't really have the time, she claimed, because of the horse training. The garden that went in was enormous, easily enough for 7 families. She bought both pints and quarts

this year, case after case and lots of Tattler lids. When the shipment was delivered, I was at work. Guess who got to put it away?

“How many jars did you buy?”

“A gross of each.”

“There’re more than 12 boxes of pints and quarts.”

“That’s right; I bought a gross of each. You know, 144 boxes of each. That gives us 1,728 quarts and the same number of pints. All wide mouth and I bought Tattler lids and rings to last a lifetime.”

“How much did you spend?”

“They threw in free shipping and unloading.”

“That doesn’t answer my question.”

“Right. I spent enough to pay for the things I bought. It’s a good thing the Tattler lids are reusable, they’re expensive. I got volume discounts, alright? Two dollars per case on the jars.”

I gave up; she obviously wasn’t going to answer my perfectly reasonable question. I used a pallet jack to move the pallets of jars into a smaller area and cover the boxes with tarps. Then, I got some paracord and anchored the tarps in place. Lori had taken the Tattler lids somewhere, probably the basement. While Canning Pantry typically ships via UPS, it was obvious that this order had come by motor freight. If Canning Pantry gave her a \$2 discount per case and paid for the freight and unloading, how much were those jars marked up? She only saved \$576 plus the freight and unloading.

We were on the edge of our chairs the entire summer waiting for China to blame the US for the earthquake. I decided that they hadn’t read *True Terror* and didn’t know about the Tesla Earthquake machine. Some of their scientists studied in foreign schools and they knew perfectly well about Tesla’s experiments. Six months passed before China began to blame Mitt for the earthquake.

Mitt hadn’t said what he was going to do to the Chinese if they grabbed any American property and he left himself wide open. How do you disprove a negative? He could say, “We didn’t do it,” but he couldn’t prove it.

Arguments that appeal to ignorance rely merely on the fact that the veracity of the proposition is not disproven to arrive at a definite conclusion. These arguments fail to appreciate that the limits of one’s understanding or certainty do not change what is true. They do not inform upon reality. That is, whatever the reality is, it does not “wait” upon human logic or analysis to be formulated. Reality exists at all times, and it exists independently

of what is in the mind of anyone. And the true thrust of science and rational analysis is to separate preconceived notion(s) of what reality is, and to be open at all times to the observation of nature as it behaves, so as truly to discover reality. This fallacy can be very convincing and is considered by some to be a special case of a false dilemma or false dichotomy in that they both fail to consider alternatives.

A false dilemma may take the form:

- If a proposition has not been disproven, then it cannot be considered false and must therefore be considered true.
- If a proposition has not been proven, then it cannot be considered true and must therefore be considered false.

Such arguments attempt to exploit the facts that (a) true things can never be disproven and (b) false things can never be proven. In other words, appeals to ignorance claim that the converse of these facts are also true (therein lies the fallacy).

To reiterate, these arguments ignore the fact, and difficulty, that some true things may never be proven, and some false things may never be disproven with absolute certainty. The phrase “absence of evidence is not evidence of absence” can be used as a shorthand rebuttal to the second form of the ignorance fallacy (i.e. P has never been absolutely proven and is therefore certainly false). Most often it is directed at any conclusion derived from null results in an experiment or from the non-detection of something. In other words, where one researcher may say their experiment suggests evidence of absence, another researcher might argue that the experiment failed to detect a phenomenon for other reasons.

What was that saying of Sir Walter Scott's? It will come to me... something about tangled webs.

As it turned out, people hadn't taken Mitt too seriously when he made his announcement but the next day when China had the earthquake, the local disaster response agencies ran out of the updated Civil Defense books in mere minutes. The entire printing runs had been distributed to the states but they had dropped the ball and had to rush to distribute their remaining supplies.

The supplies were eventually exhausted, but... it costs a lot to build even a simple basement shelter. And many homes didn't have basements these days. A basement usually existed in the northern latitudes because the foundation had to be below the frost line. According to Wiki:

*A basement can be used in almost exactly the same manner as an additional above-ground floor of a house or other building. However, the use of basements depends largely on factors specific to a particular geographical area such as climate, soil, seismic activity, building technology, and real estate economics.*

*Basements in small buildings such as single-family detached houses are rare in wet climates such as Great Britain and Ireland where flooding can be a problem, though they may be used on larger structures. However, basements are considered standard on all but the smallest new buildings in many places with temperate continental climates such as the American Midwest and the Canadian Prairies where a concrete foundation below the frost line is needed in any case, to prevent a building from shifting during the freeze-thaw cycle. Basements are much easier to construct in areas with relatively soft soils, and may be foregone in places where the soil is too compact for easy excavation. Their use may be restricted in earthquake zones, because of the possibility of the upper floors collapsing into the basement; on the other hand, they may be required in tornado-prone areas as a shelter against violent winds. Adding a basement can also reduce heating and cooling costs as it is a form of earth sheltering, and a way to reduce a building's surface area-to-volume ratio. The housing density of an area may also influence whether or not a basement is considered necessary.*

*Historically, basements have become much easier to build (in developed countries) since the industrialization of home building. Large powered excavation machines such as backhoes and front-end loaders have reduced the time and manpower needed to dig a basement dramatically as compared to digging by hand with a spade, although this method may still be used in the developing world.*

*For most of its early history, the basement took one of two forms. It could be little more than a cellar, or it could be a section of a building containing rooms and spaces similar to those of the rest of the structure, as in the case of basement flats and basement offices.*

*However, beginning with the development of large, mid-priced suburban homes in the 1950s, the basement, as a space in its own right, gradually took hold. Initially, it was typically a large, concrete-floored space, accessed by indoor stairs, with exposed columns and beams along the walls and ceilings, or sometimes, walls of poured concrete or concrete cinder block. Basements in places with high water tables were usually called swimming pools. Places that were prone to earthquakes frequently lacked basements, California being a good example. I was surprised we had one.*

Since we already had a shelter that I'd mentioned to my fellow Rangers we had the depth we needed to repel boarders should it ever come to that. On a scale of 1-10 with 10 being the worst possible outcome, TOM's favorite choice, GTW, was about 25<sup>th</sup> on my list. The only thing below it was an asteroid wiping out the planet. Nibiru obviously hadn't come.

On the other hand Iran and North Korea had *the bomb*. Israel ended the nuclear ambiguity and admitted *they had the bomb*. They were deployed on their Jericho missiles, some of the cruise missiles on their submarines and on the F-35Is. In fact, their announcement said that they had a surprise for anyone who attacked them. I like surprises, generally. In this case, being surprised by Israel might not be a good thing. When ABC News broadcast a clip from an airshow in Israel, I recognized the shape of the

wing. Israel had built the F-23 stealth fighter. Both YF-23 airframes remained in storage until mid-1996, when the aircraft were transferred to museums. YF-23A PAV-1, serial number 87-0800, registration number N231YF, was on display as of 2009 in the Research and Development hangar of the National Museum of the United States Air Force near Dayton, Ohio. YF-23A PAV-2, serial number 87-0801, registration number N232YF, was on exhibit at the Western Museum of Flight until 2004, when it was reclaimed by Northrop Grumman and used as a display model for an YF-23-based bomber. PAV-2 was returned to the Western Museum of Flight and was on display as of 2010 at the museum's new location at Torrance Airport, Torrance, California.

Ok, but what happened to the blueprints? As a matter of law, the F-22 Raptor couldn't be exported. However since the YF-23 was never adopted as a US military aircraft, had someone sold the blueprints? Or, more likely, stolen them? The first YF-23 was painted charcoal gray and was nicknamed *Spider* and *Black Widow II*, the latter after the Northrop P-61 Black Widow of World War II. It briefly had a red hourglass marking resembling the marking on the underside of the black widow spider before Northrop management had it removed. The second prototype was painted in two shades of gray and nicknamed *Gray Ghost*. The news clip showed a gray colored plane with that distinctive diamond shaped wing.

The ABC commentator mentioned that the aircraft was powered by Rolls Royce engines. I guess if they were going to steal an aircraft design and build it themselves, they might just as well use good engines. Previously, Israel had used F-15Is and F-16Is which had been joined with the F-35Is. The F-15Is were modified F-15Es and the F-16Is were a two-seat variant of the Block 52 developed for the Israeli Defense Force – Air Force (IDF/AF). Israel issued a requirement in September 1997 and selected the F-16 in preference to the F-15I in July 1999. An initial "Peace Marble V" contract was signed on 14 January 2000 with a follow on contract signed on 19 December 2001 for a total procurement of 102 aircraft. The F-16I, which is called Sufa (Storm) by the IDF/AF, first flew on 23 December 2003, and deliveries to the IDF/AF began on 19 February 2004. The F-16I has an estimated unit cost of approximately US\$70 million (2006).

On the military side, Rolls-Royce, in co-operation with other European manufacturers, has been a major contractor for the RB199 which in several variants powers the Pannavia Tornado, and also for the EJ200 engine for the Eurofighter Typhoon. Two modified RB199 engines also powered the EAP demonstrator which evolved into the Typhoon. Rolls-Royce has matured the Rolls-Royce LiftSystem invented by Lockheed Martin for the Joint Strike Fighter (JSF) F-35 Lightning II to production level, planned to be produced in significant numbers. There was no significant difference between the Roll Royce engine and the PW 119 selected for the YF-23.

The F-16I's most notable difference from the standard Block 52 is that approximately 50% of the American avionics have been replaced by Israeli-developed avionics (such as the Israeli Aerial Towed Decoy replacing the ALE-50). The addition of Israeli-built autonomous aerial combat maneuvering instrumentation systems enables the training exercises to be conducted without dependence on ground instrumentation systems, and

the helmet-mounted sight is also standard equipment. The helmet-mounted sight, head-up display (HUD), mission computer, presentation computer, and digital map display are made by Elbit Systems of Israel. Furthermore, the F-16I is able to employ Rafael's (All current projects are classified.) new Python 5 imaging infrared-guided high-agility air-to-air missile. The F-16I also has the Israel Aircraft Industries (IAI)-built removable conformal fuel tanks (CFT) added to extend its range; removal takes two hours. Key American-sourced systems include the F100-PW-229 turbofan engine, which offers commonality with the IDF/AF's F-15Is, and the APG-68V9 radar.

You can add the surprise F-23I to the list. I could be wrong, but they do have the capability to build aircraft and what better to start off with than a stealth air dominance fighter. Many of the aircraft Israel acquires from the US and other countries are modified by their aircraft industries into what they expect the platform to provide. You remember Osiraq? They used the F-15s for CAP and the F-16s as bombers. Yeah, huh? And then we killed one those pilots with the Space Shuttle. Our Air Force selected the F-22 Raptor and it kills the pilots. They eventually figured it out; it was the G-suit vest and some of the oxygen tubing. I read it on the internet. The pilot who got killed in Alaska couldn't reach his emergency oxygen handle and the Air Force is fixing that too. It costs whopping \$47 per aircraft.

If you're wondering why I keep slipping away from the China issue, it's because there isn't much to report. As I said, China claimed the US was behind the earthquake and there is no way to disprove a negative. They didn't seem to be raising their missiles to fuel them in preparation of a nuclear strike and until they did, there wasn't much Mitt could do. They didn't have very many silo based missiles that we were aware of. The two additional *Varyag* class Carriers put to sea for sea trials within a month of each other. Moreover that new "secret" submarine base was getting crowded. I wonder how many SSBNs they've completed.

## Earthquake – Chapter 11 – First Steps

Just after we had the garden harvested and everything canned or frozen, the Department of Homeland Insecurity issued an advisory. The long and short of it was that the Chinese submarine fleet had departed for parts unknown. We had set aside the notion that we were going to face them in an invasion since we were paying off the recalled debt more rapidly than anyone thought possible.

China had been turning the repaid debt into funding for their Army, Air Force, Navy and the 2<sup>nd</sup> Artillery Corps. Any well informed individual understands the general state of the PLA. What their naval forces lack is offset by their ground forces and air forces. There has been no estimate made of how many J-20 stealth fighters they possess, but they aren't short on generation 4 J-10s. The best guess is that they have managed to build a total of 6 later generation SSBNs using the JL-2 missile.

Their surface navy is short on ships and they would barely have enough to support 3 Carrier groups. In that respect they generally have what we have or equal, only in smaller numbers. Various sources cited a nuclear weapons inventory of ~400 weapons. The missile inventory includes a large number of short range missiles and Intermediate range missiles with few ICBMs. I didn't say not any; I said not many.

After the US lost track of the submarines we focused on the destroyers, frigates and carriers. The two *Ulyanovsk* class were under construction and appeared to be at least 3 years from launch and another 2-3 years from operational status. The 3 Carrier Task Groups had disappeared and it took 6 weeks to locate them which only came when they departed their locations and headed for us.

That got Mitt back on TV with another, much stronger warning about the information booklets on constructing home shelters and a suggestion to stock up on enough food for a minimum of 2 weeks and a maximum of 3 months. Everyone believed him this time and within hours the store shelves were bare, with people fighting over whatever was left. The only thing Lori inventoried was the livestock feed and ammo. We could get by with having our brass reloaded. None of the prep food sites were accepting orders.

We all got together over the weekend and had shooting practice and cleaned the weapons for when we might need them. We agreed that should China attack, the US would kick butt and take names. For those among the group who were unfamiliar with the M67, we brought out the M69s and ran the training course outlined in FM 3-23.30. Everyone got to shoot something except for the twins.

We knew that China was headed generally in our direction, they were steaming east. Our attention was dragged from the west coast to the east when Iran attacked Israel. There's foolish and there's just plain dumb. Iran had a few missiles with nuclear warheads and Israel had Jericho IIIs MIRV'd with 3 150kT warheads. They didn't say how many and when asked in an earlier interview, replied "Enough." CNN reported that Israel launched 15 missiles, taking out all 12 Iranian nuclear sites plus Tehran and other



counter-value targets. Since Iran had initiated the exchange, Russia didn't get involved, a shock to everyone including yours truly.

Meanwhile, back on the west coast, several things happened. First, a submarine blockade using 688I class subs was emplaced running from the Canadian border to the Mexican border. Descriptions of the locations were vague, running from the 200 mile economic limit to double that range. Six Carrier Strike groups were launched, each carrying their normal complement of aircraft plus 6 UAVs and 8 F-35Cs. F-22 Raptors and tanker aircraft were assigned to west coast Air Force Bases, and in more than one case, commercial airports.

All Virginia class submarines had transitioned the Panama Canal much earlier to support the 2 Seawolf and 1 Jimmy Carter class subs now stationed on the west coast. There was some speculation in the media that the 688I class subs were carrying TLAM-Ns in their vertical launch tubes. Other speculations suggested that all the TLAM-Ns had been deployed with the 4 Ohio class SSGNs. It didn't matter which boats had them, the Tomahawk was a proven system.

Was I going to get number 25 on my list? Not exactly. What happened instead were the Ohio class SSBNs wiping out China's 2<sup>nd</sup> Artillery Corp's assets before any could be launched, our managing to sink every Chinese missile sub and B-2 Spirits dropping nukes on their 3 Carrier Groups. Mark one for our side. What I wouldn't give to have listened in to the conversation between Colorado Springs (Washington) and Moscow (or wherever). Russia moved troops to their border with China and sealed it rather than crossing it. China had refused all foreign aid, remember.

"No war, huh?"

"Oh, we had a war. The difference this time was that we didn't play by the same rules. China had limited assets and we struck first wiping them out. Truman claimed using nukes on Japan saved over 1 million lives. Mitt can up that tally multiple times. Frankly Mitt was a surprise. I almost didn't vote for him."

"Why did you?"

"Principle. I've never voted for a Democrat candidate before and didn't want to spoil my record."

"What are we going to do with all the food and ammo we've accumulated?"

"We can rotate through the food and replace it as it's used up. We can shoot the ammo to keep in practice and reload it to match spec including sealing the primers and the crimp."

"Ok, I have another question. About 9 months before we had that earthquake here, they had the big Tōhoku earthquake and tsunami in Japan. What became of that?"

“We were busy wrapping up the final touches on the shelter and I didn’t pay much attention when it happened. Then in December we had our own earthquake and had to rebuild the house so I didn’t follow it. Did you follow the news?”

“That’s just it, there wasn’t really much on the news. Once we had the satellite back up and running, I tried to follow it on the internet. Most of the coverage was limited to Wiki updating the timeline. There was some concern during the spring of 2012 about another earthquake causing a meltdown of the holding pool for the spent fuel rods for the number 4 reactor. But, it’s all over my head so maybe you’d better check it out.”

“I read Wiki and followed that with a Yahoo search. The Japanese are up to their hind ends with problems because of the Fukushima Daiichi nuclear disaster. There are six reactors at the site and 3 melted down. The 4<sup>th</sup> had the fuel rods pulled and stored in a holding pond that’s been leaking. They’ve tried numerous solutions to the problems and estimate it could take as long as 40 years to affect a cleanup.”

“What are they going to do?”

“They get about 30% of their electricity from nuclear power plants and intend to replace the electricity with a different source, PV panels. That will take a long time to accomplish even though a Canadian company has built a manufacturing plant over there to produce PV panels. That isn’t the biggest worry, though. Some concern has been expressed about they’re having another earthquake that would affect Fukushima Daiichi.

“We have similar problems in California. Diablo Canyon nuclear plant is built on one and near another earthquake fault and wouldn’t withstand a 9.0  $M_w$  like the Japanese had. San Onofre down in San Clemente had to shut down due to leaks. They determined that the leaks were attributable to excess vibration, nearly double the amount the replacement pipes were designed to withstand. That site is built to withstand a 7.0  $M_w$  while Diablo Canyon was built to withstand a 7.5  $M_w$ .”

“How big of an earthquake could they get on the San Andreas?”

“I’m not a geologist, but I’ve read that research has shown that the Southern segment, which stretches from Parkfield in Monterey County all the way down to the Salton Sea, is capable of a Richter scale 8.1 earthquake. An earthquake of that size on the Southern segment, which, at its closest, is 40 miles away from Los Angeles, would kill thousands of people in Los Angeles, San Bernardino, Riverside, and other areas, and cause hundreds of billions of dollars in property and economic damage.

“A study completed by Yuri Fialko in 2006 has demonstrated that the San Andreas fault has been stressed to a level sufficient for the next *big one*, as it is commonly called; that is, an earthquake of magnitude 7.0 or greater. The study also concluded that the risk of a large earthquake may be increasing more rapidly than researchers had previously be-

lieved. Fialko also emphasized in his study that, while the San Andreas Fault had experienced massive earthquakes in 1857 at its central section and in 1906 at its northern segment, the southern section of the fault has not seen a similar rupture in at least 300 years.

“If such an earthquake were to occur, Fialko's study stated, it would result in substantial damage to Palm Springs and a number of other cities in San Bernardino, Riverside and Imperial counties in California, and Mexicali municipality in Baja California. Such an event would be felt throughout much of Southern California, including densely populated areas of metropolitan Los Angeles, Orange County, San Diego, Ensenada and Tijuana, Baja California, San Luis Rio Colorado in Sonora and Yuma, Arizona.

*“The information available suggests that the fault is ready for the next big earthquake but exactly when the triggering will happen and when the earthquake will occur we cannot tell,”* Fialko said. *“It could be tomorrow or it could be 10 years or more from now,”* he concluded in September 2005. The largest earthquake to date was the 1857 Fort Tejon earthquake: About 217 miles were ruptured in central and southern California. Though it is known as the Fort Tejon earthquake, the epicenter is thought to have been located far to the north, just south of Parkfield. Only two deaths were reported. The magnitude was about 7.9.”

“What might happen if the Fukushima whatever had another earthquake?”

“We probably get out of the frying pan and into the fire. I’ve read that there is a potential for a huge amounts of  $^{131}\text{I}$ ,  $^{137}\text{Cs}$  and  $^{201}\text{Tl}$ . Potassium iodide or iodate will handle the radioactive iodine and Prussian Blue, aka Radiogardase, will handle the Cesium and Thallium. KI and  $\text{KIO}_3$  are over the counter but Radiogardase is prescription only.”

“Can we get some?”

“Unlikely since the threat of war with China is gone.”

“But what about the Middle East?”

“After what Israel did to Iran? You’re kidding, right?”

“Well, they do have the F-35s.”

“That’s not all they have. I saw that clip on ABC and Israel somehow got their hands on the F-23 and built some. It’s stealthier than the F-22 and doesn’t have any problems with the oxygen system that I’m aware of. The only thing the F-22 has over it is maneuverability.”

“Where did they get those?”

“I suspect they stole the plans. We probably have another Pollard on the payroll.”

“Back to that drug, Prussian Blue was it?”

“Yes Prussian Blue aka Radiogardase. What about it?”

“Do they even carry it in the drug store in Tiptonville?”

“I doubt it. I do know that there is some in the Strategic National Stockpile. Supposedly, they can distribute that within 12 hours to anywhere in the US it's needed.”

Things were getting complicated. There had been a large quake on the New Madrid which turned out better than anyone had a right to expect. The US had its oil supply cut off and managed to circumvent that problem. China had called our debt and then tried to start a war over it. Except for the earthquake Mitt had been creative and pulled our chestnuts out of the fire both times. When Iran decided to push the Israelis, they got much more than they bargained for. And, as nearly as I could tell, few people knew that Israel had the F-23I. They didn't flaunt it.

With the four travel trailers here, we had an armed camp with, as I mentioned before, depth. The next thing that came up was an opportunity to acquire a pair of the HK416s and a pair of the HK417s, the select fire models, with the AG-C/EGLM grenade launchers and 20" barrels. While the rifles were duplications, Lori tripped me up with the, *would you rather have it argument*. Hell, I'd take one of those 25mm grenade launchers if someone offered me one. I heard that they had the cost of the ammo down to ~\$28 per round.

For whatever reason, I was plagued with a series of nightmares for 5 nights running. I'd wake up in a cold sweat, but by the time I was fully awake, I couldn't remember the nightmare beyond the fact that each had revolved around a different situation involving our five families. Try as I might, I couldn't remember the dreams.

I mentioned it to Lori, but without the details, she couldn't help me determine what the dreams meant. When I had another the next night, I concluded that the nightmares were premonitions. Of what, I had no idea.

In parapsychology, precognition, also called future sight, and second sight, is a type of extrasensory perception that would involve the acquisition or effect of future information that cannot be deduced from presently available and normally acquired sense-based information or laws of physics and/or nature. A premonition and a presentiment are information about future events that is perceived as emotion.

The existence of precognition, as with other forms of extrasensory perception, is not accepted as other than a purely psychological process by the mainstream scientific community because no replicable demonstration, “on demand”, has ever been achieved.

Scientific investigation of extrasensory perception (ESP) is complicated by the definition which implies that the phenomena go against established principles of science. Specifically, precognition would violate the principle that an effect cannot occur before its cause. However, there are established biases, affecting human memory and judgment of probability, that create convincing but false impressions of precognition.

Was it just established biases, affecting human memory and judgment of probability, that create convincing but false impressions of precognition? As far as I was concerned, they were simply nightmares. We both kept ourselves aware of current events to the state possible. It didn't seem to me that Israel having the F-23I and F-35I and having used nukes was behind the nightmares. China was down for the count and it would be years before they pulled themselves up by their shoestrings. Only North Korea backed them... so they were essentially going it alone.

## Earthquake – Chapter 12 – Uh Oh

The asteroid wasn't large as these things go, about 200' long and 75' in diameter. It came from the Kuiper Belt, dislodged by another rock and sent on a course to the Sun and beyond. When it was first dislodged, it was in the viewing arc of the Earth but the Earth continued its orbit around the Sun and any chance of observing it was lost, for a few months.

The next opportunity that came found us involved in a war with China and precious little of the available resources were devoted to searching for space rocks. We were focused on Earthly events at the time and I had placed an asteroid strike at the bottom of my list. In fact we were more worried about Fukushima Daiichi being struck with another earthquake than an asteroid strike.

When the observatories announced the asteroid and its possible impact with Earth, the news media went into overdrive seeking details. At first, the only information available was a probably strike latitude, 36.5958595275879. That was awfully close to where we lived. But without a longitude, it didn't seem too worrisome. It didn't take that long to develop the probable longitude, -89.5283889770508.

"That purported strike location is right on top of us, Ben. We have to move."

"What if they're wrong?"

"What if they're right?"

"What do you suggest?"

"How about we move to 42° -80° temporarily?"

"Where is that?"

"Pennsylvania."

"How about 40° -86°?"

"Where is that?"

"Indiana."

"I'll arrange a livestock transport and a box trailer to move our most important goods."

"When?"

"Just as soon as I can find someone that will board the livestock and let us drop the trailer."

“I’ll talk to the guys.”

Before I talked to the guys, I talked to our insurance agent. In the unlikely event that the asteroid stuck near enough to where we lived, were all of our buildings and equipment covered? He said something about an Act of God and I asked if our coverage could be extended to cover those. He’d let me know.

“They will write an all risks, all hazards, replacement cost rider to you policy. You’ll be covered for everything, at replacement cost, not to exceed 125% of the value of your home, shelter and out buildings. It will only cover you for the time period up to and including the asteroid strike and it will cost you \$6,500.”

“Lori, they want \$6,500.”

“Use my debit card. I’ve got a farm in Indiana lined up and am talking to a transportation company. Have you talked to the guys?”

“Briefly. I was just getting into it when he called back.”

The Rangers I worked with were of the opinion that the risk was minimal and they’d chance it. I arranged for a leave of absence and Lori and I made the move a few days before the expected strike. Much of the asteroid had burned up in the atmosphere, greatly reducing its size. The actual strike came close enough for government work, it struck at 36.6129608154297 -89.7554702758789. That’s still in New Madrid County and the maps show it was Como. At the moment, it’s a hole in the ground larger than Meteor Crater in Arizona caused by a 50 meter nickel-iron meteorite.

Around the rim of the crater, soil and rocks had been pushed up what I’d estimate was 100’. The Missouri National Guard and Army had the crater encircled and I really doubt those magazines in their M16s and M4s were unloaded. The explanation was brief, the rim was unstable and so far the only exploration allowed was by military helicopter. A temporary no fly zone had been instituted by the president. Their orders were to shoot anyone attempting to climb the rim.

Apparently someone used Goggle Earth or something and had an overhead shot of the crater. It was a churning mass of lava. It was probably hotter than a \$3 pistol after a gunfight. We went the rest of the way home to check on our place, assuming we still had a place.

It was still there, but the house had crumbled in the blast wave and the underground shelter had collapsed. Our insurance agent was there taking pictures. He said the company wasn’t too happy about extending the all risks, all hazards replacement cost rider. I reminded him we paid what they’d asked and some of the replacement items wouldn’t cost any more now than they’d cost originally.

“We had essentially two shelters, the underground shelter and the house. We should be able to build a basement as an underground shelter and a two story shelter above that.”

“Would you settle for a dome with a basement?”

“Would that be any cheaper?”

“It would be within the policy limits and I think the company would buy it. They replaced another home with a dome last year.”

“What about the out buildings? Any chance they’d replace them with a dome?”

“I’ll ask. My best guess is that they might pay for the dome but you have to pay for the basement, having it finished off inside and pay for the earth cover. I assume you intend to cover the house dome with an earth covering?”

“Why would you say that?”

“You’re one of those survivalists, aren’t you?”

“We’re preppers.”

“Same difference.”

The company agreed to pay for a basement covered with a dome but only 6” of concrete. We had to come up with the extra and Lori had sold some horses to some high-rollers in Indiana and dug into her bottomless trust, er, Larry Edelson investment. The house dome had an internal radius of 30’ and the basement had 12” of reinforced concrete topped by 72” of compacted earth and more concrete. The buried tanks weren’t damaged and as luck would have it, the generator came through ok.

The barn dome had a radius of 60’ and we accepted the 6” concrete but paid for 2” additional and a basement to use for storage. Nothing fancy, just a regular basement topped with 6” of supported concrete. We did have to pay for the earth topping for the two domes. The two permanently installed trailers were trashed. We recovered one QD 12.5 and put it in the barn basement. The insurance company had to replace the PV panels and inverters too. Rather than replace the batteries, they cut us a check. It wasn’t for \$75,000 but it was a start and we put 24 submarine batteries and associated equipment in the barn basement.

We didn’t break even on the deal when it was said and done. Several horses had been sold, Lori dipped into her bottomless investment and we had fewer buildings. Nevertheless, what we had was better by a large margin. We had it set up that when the generators kicked in just for the maintenance cycles, they charged the batteries. The batteries were never below a 96% charge level and usually ran 98% or better. We only had one



bank of 24 batteries, but Lori was buying spares whenever she had enough to buy a pair, which turned out to be monthly. A year after we moved back in, we had 2 battery banks in the barn basement and more PV panels here and there.

She never duplicated the deal she got on the first pallets of panels but when she bought, she bought by the pallet. The first purchase was made by the insurance company for 3 pallets of 300w, 48v panels, the inverters/charge controllers, etc.

The garage was also flattened although the tunnels survived. The guys helped and we replaced the single story 3 car garage with a 2 story 3 car garage giving us extra storage space.

TOM had featured domes in a few of his later stories and I found the concept appealing. When the insurance agent suggested a dome, I almost tripped over myself saying yes. I had built the only shelters I intended to build in this lifetime. That's not to say I didn't do a lot of work on the domes. Someone had to move the earth and I rented a frontend loader every weekend and did it myself. It took almost forever, or so it seemed. It was a rent-to-own deal and I rented the loader so much we ended up owning it.

My fellow Rangers down at Reelfoot Lake State Park came through the strike. Their injuries ranged from scratches to broken bones. Their homes were damaged but could be repaired. None of them bought an all hazards, all risks policy rider. It took the four of them several months before they had their home repairs done. They were handy with a hammer and saw and did their own repairs with their only out of pocket expense being materials.

After the grass sprouted on the domes, Lori and I invited the families up for a barbeque.

"Would you look at those domes?"

"Guys, you don't need to bring anything except your supplies. There is room in the house and barn basements to house all four families. The house and barn basements are connected with a tunnel which is an idea I got from *Percy's Mission*."

"Who is Percy?"

"Percivale George Jackson, an Iowa farmer. It was a story written by Jerry D. Young."

"You like those survivalist stories?"

"They're entertaining and educational. Many of the things we had here before and have now, came about because of those stories."

"Your house and shelter didn't withstand the blast from that asteroid."

“Maybe not, but the house dome will withstand anything except a direct hit by a nuke or asteroid. I don’t believe anything other than Cheyenne Mountain would withstand those.”

“Answer a question for me if you will,” Jake said.

“Go for it.”

“We had that earthquake back 2011, right?”

“Right.”

“Before that you used your underground shelter as protection again several tornados, right?”

“Right.”

“And then, we had the crash of ‘14 with China calling the debt, right?”

“We sure did.”

“After that China attacked us, right?”

“We kicked butt and took names.”

“Then to make matters worse, Iran attacked Israel and those Jews wiped them out, right?”

“Right, again.”

“Finally, we had asteroid strike in what amounts to our back yard, right?”

“You’re batting 100%.”

“What else can happen?”

“Did you ever hear of the Rule of Threes?”

“Nope, explain it.”

“You essentially listed 6 events, the tornado spree, the earthquake, the crash of ‘14, the war with China, the Iranian attack and the asteroid strike. Tired Old Man says bad things happen in threes. He also says it’s exponential which means if you get past 3 to the first power, you’ll go to 3 to the second power which is 9. We still have 3 events to go.”

“Hogwash.”

“Poppycock.”

“Bull.”

“I don’t believe it.”

“That’s up to the 4 of you. I’m just saying that you have a place to shelter if the need arises.”

“I think maybe I’ll store those military weapons here. Guys?”

“Right, let Ben run the risk of getting caught with them.”

“Ben, is that ok?”

“Be sure to leave the ammo.”

“Ben, what else could happen?”

“Jake, to quote Spock, *There are infinite possibilities.*”

“For instance?”

“In the mini-series *10.5*, the Mississippi split into an inland waterway; an idea that Jerry D Young incorporated into *Ozark Retreat*. Who knows, maybe we’ll end up being invaded by Mars.”

“There’s no life on the surface of Mars. We’ve been all over the planet.”

“Did you ever see the mini-series *Martian Chronicles*?”

“I read Bradbury’s anthology. The mini-series didn’t follow it.”

“Would you agree that there are infinite possibilities?”

“Logically, yes. Ok, we’ll come here to shelter if it becomes necessary. Other than keeping our double bought STS at home, we’ll keep our LTS here.”

Charlie and Don lost their travel trailers due to the strike and so did Hank and Jake. The underground shelter had only partially collapsed, omitting the generator and a fair share of the LTS left behind. We made it a mission to replace all that had been lost. None of their wives had jobs after the strike. Selling off the horses had cut the herd and Lori wasn’t nearly as busy as in the past. Lori, Norma, Jacob Jr., Joseph, Shelly, Carol and

Chuck worked the garden and canned and put up enough food for the families for a full year. Trinity entertained Jillian and Juliet.

There were bargains to be had on surviving singlewide mobile homes. Real bargains if they were purchased *As Is*. Since the plumbing was already in and there were 2 QD 12.5s plus the PV panels and 2 banks of submarine batteries, we decided to only use the generators to recharge the batteries, if necessary. After the singlewides were placed, repaired, and connected we were better off than before. The guys bought every available working used PV panel in Tiptonville to set up their arrays.

The long and short of it was they were feeding 48vdc to the barn basement and receiving 120/240vac from the same source. Due to the line losses, they didn't get back all they sent but everyone had 100 amps of 240vac. When the ladies weren't otherwise occupied with the garden, they worked on one of the homes until they classified it as ready for habitation.

There were two access points for our basement shelters. Each had a blast hatch covering a 4' square vertical access equipped with a mounted ladder and an overhead winch to lower anything that would fit through the blast hatch. Each also had a wrap-around ramp covered at the top with a sliding blast plate and a double blast door at the bottom allowing larger items to be moved in (*Just in Case*).

The lodgepole pine antenna pole was still standing. The antennas, conversely, were probably somewhere in Tennessee or beyond. We hired a linesman to replace the antennas and coaxial cables. He had an apprentice helping and we assembled the antennas, rotor, etc. on the ground as requested. We replaced the 6x8 antenna standoffs using the same holes although we replaced the rotor mount for the beams.

We entered winter that year in better condition than before the strike and all of Lori's mares were with foal. The acreage next door came on the market and we picked it up for a pittance. The home had been destroyed and they didn't have enough insurance coverage to pay for the demolition and rebuilding. We paid below market and we five did the demolition over the winter, preserving the well for irrigation. The propane hot water heater, 40-gallons, had escaped destruction and it went in the barn shelter.

With a bit of grading, we were able to fill the basement hole. After that, we installed a gate to our new pasture and added a water tank with a float valve. By spring we were way better off. Although Mitt had gotten reelected, the vote had been close, probably due to his foot-in-mouth disease. I think the only reason he got reelected because he had a new running mate, Sarah Palin who replaced Condie Rice. He picked up a lot more of the Tea Party vote. She was an ex-Governor too. They sure made a big deal about her buying her own wardrobe.

The difference in the 2 shelters was obvious and the one under the home dome was clearly superior. It was topped with a foot of concrete and 72 inches of soil and 4" of concrete, all under a 12 inch thick reinforced concrete dome with a minimum of 72 inch-

es of earth cover. The barn dome was 8 inches of reinforced concrete with 72 inches of soil cover. The floor separating the barn and basement was 6 inches of supported reinforced concrete. We envisioned the families using the home shelter in the event we had to shelter again for anything more than a tornado.

There had been a few changes in the firearms and ammo situation that merit mentioning. Since the .338 Lapua is a better long range cartridge than the .50BMG and since the .416 Barrett was available from McMillan, Lori acquired a Tac-338 and Tac-416. Although the Tac-416 was originally offered only in a single shot, McMillan now had it available with the 5 shot magazine. There were 2 sources of ammo for the .416, Barrett and Hornady and we had 2,000 rounds of each. The Tac-338 was good for ranges between the Tac-50 and the Tac-416 and, again, the ammo available was Lapua factory ammo and Hornady ammo.

Both rifles were equipped with Nightforce NXS 12-42x56mm riflescopes with the illuminated Mil-Dot Reticle and McCann Night Vision Rail to holding the AN/PVS-27 MUNS. The suppressors came from Texas and were titanium. The only downside to suppressors was the more frequent cleaning required since they backed up the powder particles and gases. I could equip four of the five of us with a very good sniper rifle with the M-25, Tac-50, Tac-338 and Tac-416. The easiest solution was to add another custom built M-25.

However, snipers don't go sniping alone unless their name is Hathcock so we had to train our wives to be our spotters. While we could use laser rangefinders, it was better to have the spotter measuring the range and doping the wind along with getting a better picture of the overall target area. Lori called the dealer who supplied the original rifles and ordered another M-25, complete. She also acquired 20 cases of the XM118LR ammo.

My fellow Rangers equipped their families with the old fashioned firearms with a mixture of full power and cowboy ammo. Since the children would grow, they went with Kirkpatrick's The Marshal Crossdraw rigs with extra gunbelts. I told them about the rigs because I'd read about them in one of TOM's later stories. If and when the youngsters began carrying single action revolvers they'd probably start with a 5½" on the right side as all were right handed. The expended .45 Colt ammo was reloaded with 250gr cast lead wheel weights and a full load of smokeless powder. Lead wheel weights were getting hard to find since they switched to zinc.

Although they could have moved to our place and lived in their singlewides, all four chose to remain in Tiptonville and let the wives commute during the growing season. Saturday was typically range day and also a busy day at the park. We adjusted the schedule to practicing Tuesday and Wednesday, the slowest days of the week. The guys did another mass buy and bought Browning Hi-Powers and Bushmaster 20" Barrel M16 A3 Type Rifles with the short stroke gas piston with semi-full configuration for the children.

If we had been blessed with children, they'd had both assault rifles and main battle rifles along with a M1911 pattern handgun in .45acp. I'm sure we would have added either 870s or 590A1s to equip them more fully along with a .22LR lever action rifle for hunting. One could always add a longer barrel to the shotgun and add a magazine stop to conform to the law, if necessary.

The following year, we added parapets to both domes using the same construction method as before, 2 layers of filled block with soil between the layers. I added 6" of extra soil, but didn't know if those extra 6" would make a difference since we hadn't tested the original parapets. Soil was available for the taking.

That asteroid crater up in Missouri finally settled down and the state of Missouri made it a park and gave guided tours, for a fee. I think they used the money for rebuilding because the strike activated the New Madrid Fault Zone and we were experiencing frequent aftershocks of the 2011 quake. Lori and I began to worry about a possible flood and considered building a berm (dike/levee) around our 80 acres.

## Earthquake – Chapter 13 – The Levee Project

The Mississippi has been known to flood from time to time due to excessive snowfall, rain or several causes. Sitting here above the New Madrid Fault had been uneasy from the time we bought the first 40 acres. Fortunately, our first shelter survived the December 11, 2011 earthquake and the aftershocks that followed. However, very little in the area had survived the asteroid strike. Plus there was that darned rule of threes.

I set about studying what went wrong in 2005 when New Orleans was hit by Hurricane Katrina. The general agreement was the Army Corps of Engineers had under designed the levees. We discussed the possibilities and Lori told me she'd fund the berm if the 5 of us would build it. The levee in New Orleans used a steel plate footing and core with a lot of dirt compacted around the footing and core.

After much discussion we decided to use used cast iron since it was cheaper and simply bolted everything together. New Orleans' levees were supposed to be 17' deep and we decided to go 24' above ground and 18' below ground. We envisioned that when we were done, we'd be good for a 1,000 year flood. It took a full year to trench and install the cast iron footing and internal support wall. We continued on moving soil taking it from anywhere we could get it. It was tens or hundreds of thousands yards of soil. Every bit of it had to be compacted, too, and we bought a used dozer and sheepsfoot.

The volume of soil required was a square 24' high x 24' wide by (7,290' – 24') or about 4.2 million ft<sup>3</sup> or 155 thousand yd<sup>3</sup>.

It was only later that we realized the advantage of the berm. I'll get to that in a minute. Our 40 acres were square, ¼ mile by ¼ mile. When we added the second 40, our 80 was ¼ mile deep by ½ mile wide. The circumference was therefore 1½ miles which took a lot of cast iron and soil. However, as we reached the home stretch with our construction, we noticed how much the levee resembled a castle wall. To make it complete would only require a parapet.

Since we lacked the depth in our forces, the next best choice was a barrier of some sort and barbed wire was the cheapest. All of the berm was visible from the barn parapet, that's where we established our Observation Post. We equipped the OP with spotting scopes and Night Vision in an effort to make it useable 24/7. We further topped it with a black and white CCTV camera with a 370° range of motion.

If you think maybe the 1½ mile circumference could be covered with 1½ miles of barbed wire, think again. It took 4½ miles of barbed wire for the 3 support wires and 4½ miles of barbed wire for each of the rows of concertina. Eighteen miles of barbed wire wasn't cheap. On the other hand, stringing the barbed wire was time consuming so it sort of evened out. We moved the soil and our wives installed the barbed wire.

We were now prepared for a flood, provided the water didn't rise above 24' of our existing ground level. Our existing ground level was 65' above normal river level which put

the top of our levee 89' above existing river level. I didn't mention the flood gate we constructed. We started that by pouring a concrete apron with holes for 8" pipes every 4'. The holes went down to the cast iron footings where they nested in cups. They were a positive bitch to emplace, too. Well, they were 8" thick and 40' long, so what would you expect? There were two gates that opened outwards and were not as wide as the berm. The combined width was 24' and while they met in the middle, a plate was welded on one gate to overlap the other gate. We had to *improvise, adapt and overcome*.

We lined the seams with sheet rubber or latex; I never got a straight answer. Winches pulled the gates closed and held them in place. Just before the gates were tightly closed, the support pipes were emplaced using the dozer and bucket. Then, the gates were pulled tightly against the seals and the retaining straps went around the pipes onto the bolts on the gates and nuts were added to hold them in place. It took about 90 minutes start to finish sealing the gates.

One thing we discussed and didn't do was to extend the cast iron plate above the top of the berm because it would give any attacker a place to hide. The barbed wire might only slow them down, but we could see through it. Plus we could snipe the entire perimeter from the OP. One other thing should be kept in mind. Although the levee was only 24' high, the top of the barn dome was 60' above ground level or 56' above the levee and therefore 125' above river level. The home dome was 95' above river level.

You should realize that the levee wasn't an overnight process; it took 3 years from planning to completion. That's probably faster than the Army Corps of Engineers could have built it. And, why build a levee in the first place? Fulton County is the lowest point in the state of Kentucky and is located on the Mississippi River in Kentucky Bend, where it flows out of Kentucky and into Tennessee and Missouri. That's why. It probably would have been cheaper to move...

I've been rereading my Journal and I do believe it would have been better to title it *The Fortress* than *Earthquake*. Eighty acres is  $\frac{1}{8}$  of a square mile and some of the forts built in the 18<sup>th</sup> century were very small, like Fort Washington at 0.7 acres, and others were very large, like Fort Ticonderoga at 21,950 acres.

Santayana – check; Gunny Highway – check; Rule of threes – check; .50BMG – check; LAW rockets – check; Hand grenades – check; 40mm grenades – check; more ammo than we'll ever shoot – check; Cowboy guns – check; horses - check. It's rock and roll time!

They came in the night, around oh dark thirty. Moscow is UCT +4, Central is UTC -6 so there's 10 hours difference. The flight time on their Bulava missile was relatively short and those went to counter-force targets. They were fully fitted out with 10 150kT warheads. Mitt was out of town, but they got Sarah. The ICBMs included their remaining 59 MIRVd SS-18s with 10 1mT warheads each. One shouldn't feel sorry for the



Russians because they had over 170 Topol M with 6 150kT warheads each. Some were held in reserve as were some of the Bulava SLBMs.

The Russian are prone to hold onto older systems as long as they'll work. They were still in the process of retiring SS-18s and they had a full force of 172 Topol Ms. They had developed the RS-24 Yars to replace the Topol Ms and those were fielded with 10 MIRVd 550kT warheads. Their first Regiment of 18 mobile missiles had been activated near the end of 2011. Our best estimate was that at that rate, they had 6 Regiments of missiles.

We might have been worried about the possibility of a flood, but we didn't stop following the news or Wiki. Wiki was usually more current than Global Security or FAS. And if you wanted the latest word, there was always DEBKAF. In recent months, the Russian Federation had been keeping a very low profile which usually meant that they were up to something. Besides siding with Syria and Iran among other things including keeping their border with China sealed. Israel didn't kill ALL of the Iranians... mores the pity.

We were ideally located to accumulate and store vast quantities of LTS foods. Arkansas produced huge amounts of rice and we could buy the flavorful Jasmine rice in 100 pound bags and put it up in pails. We could do the same with wheat, hard red and or white, durum, and soft wheat for baking. Oats and corn were readily available and we could even get masa (ground hominy) to make corn tortillas. The Dakotas weren't that far off and they grew every kind of bean you'd ever want. We got our pink beans from California though, just because. We got all the chili peppers we could eat from New Mexico because they had the best selection.

Some things were easier to acquire from Walton, EE or Nitro-Pak, like Mountain House and those Hungry Man MREs. We had 3 steers and 6 hogs butchered and bought additional hams (Cure 81), bacon (Homel thick sliced), butter, Jimmy Dean ground sausage and cheese. Lori found Bigelow's website and went a little crazy, but it was dutifully sealed in mylar and put up. She and the other ladies got a little carried away with some other things like half a 53' truckload of Ultra Charmin Soft mega rolls. Charmin came in regular, double, jumbo and mega rolls; think 1X, 2X, 3X and 4X in volume.

I found the best thing to unwind after a long day was Swiss Miss and I was as bad about that as she was with the Bigelow tea. Beer doesn't keep long term, but bottled liquor lasts until the bottle is drained or breaks. I knew what everyone preferred and loaded up. I wanted a whole barrel of Jack Daniel's Single Barrel, and said so, never thinking she'd spend 12.5 grand on a barrel of Tennessee Sippin Whiskey. Guess what? Anyway, I had gone for a more modest goal of Jim Beam Bourbon. We had a couple cases of this and that and the other thing and no shortage of mixes.

One thing to remember about soft drinks is to avoid the diet drinks due to their very short shelf life. Your best bet is the classics, Seven-up, Coke (or Pepsi), Ginger Ale,

Root Beer, Tonic water, Collins mix and so forth and so on. You're even better off if you can get the powdered mixes that bartenders mix with water to prepare the mixes.

The inventory was 4 cases of Jim Beam, 2 cases of Chivas Regal, 2 cases of Drambuie (Rusty Nails), 2 cases of Bombay Sapphire gin, 2 cases of cheap Jose Cuervo and 2 cases of Cuervo 1800, 2 cases of Grand Mariner, 4 cases of vodka, 1 case of Maker's Mark, 2 cases of triple sec, bitters, stemmed cherries, stuffed king olives, sweet and dry vermouth, and finally a case of Crown Royal. The Single Barrel came in 12 bottle cases and numbered 20 cases... the angel hadn't been greedy. Two-hundred forty-eight bottles at \$50 = \$12,400.

As we put the finishing touches on the OP, the girls went shopping. Their highest priority was clothing. It mostly consisted of jeans, socks, cowboy boots, underwear, long sleeve shirts, wide brimmed hats, bandanas, several cases of sunscreen, gloves and cold weather gear, cowboy style. Drover's coats with removable fleece linings, rain slickers, chaps, blunt spurs, hat covers, etc.

Lori had a two story storage building built next to the garage and ordered 2 gross of wide mouth quarts and more Tattler lids. By the way, I found them, they were in the shelter and had survived.

Back to what I was saying, they came in the night, around oh dark thirty. The weather radios went off and we knew this had to be number 7. A quick look at the clock showed ~ midnight. Lori got dressed and started moving the refrigerator contents to the basement using large baskets lowered by the winch. I had preceeded her and taken the tunnel to the barn. After I had the 2 sets of blast doors closed and locked, I fed the animals and hurried back to the shelter.

Our guests began to arrive and we used appliance carts to get the freezers to the shelter. The refrigerated goods went into one of two glass front three door grocery store refrigerators. We were just closing the upper ramp hatch when the power went down briefly. The battery banks switched in and provided the power to finish closing up.

We hooked up the AMP 200 (10,000R/hr), AMP 100 (1,000R/hr), the AMP 50 (4R/hr) and charged the dosimeters. We had low range 0-200 mREM and high range 100 Rem dosimeters. Our portable survey meter was a RAM R-200 with an upper limit of 100R/hr. Every instrument had been recently calibrated and we didn't have any of the left over Civil Defense junk.

I wasn't aware of my wife's efforts in getting prepared, healthwise. The office cabinet holding the medical supplies was now 2 office cabinets. Where had that come from? It was locked so I had to get the key from Lori. She opened it for me and began to explain.

"This cabinet contains all the drugs one wouldn't normally find in your typical home or bomb shelter. First off, in addition to the  $KIO_3$ , take note of the Radiogardase. There are several antibiotics, one in each class in good supply. Instructions are included indicating

dosage, primary and secondary uses. There are also generic drugs in good quantities covering typical medical conditions including high blood pressure, diabetes, depression, anxiety and so forth.

“Equipment wise, we have oxygen concentration, AED, CPAP, plus a little of this and a little of that. Sorry, an iron lung wouldn’t fit in the cabinet, but we can establish forced mechanical esophageal breathing (tracheal intubation) using that ventilator. Anyway, I’ve been getting instruction specifically tailored to shooting war circumstances and PAW situations. The supplies aren’t unlimited and were only planned around the five families.”

“Big bucks?”

“Some of it yes. Overall, a lot less than you think. And, don’t ask how I managed to get some of the stuff, especially things like the morphine tablets and injections. I won’t discuss that, now or in the future. Just say thank you and let it go.”

“Why do I get the impression I wouldn’t be happy if I knew the price you paid?”

“You’d not only be unhappy, you’d be furious.”

The first thing that popped into my mind was probably how she’d managed to get the things. If it were true, I would be furious, or worse. I put the thought out of my mind, something easier said than done.

It rained nukes for 3 days. There was the initial strike, a second strike and a smaller third strike, probably the last of their ready weapons. It was even money on which country had suffered the most damage to their infrastructure and population. We were unaware that in response to Russia and the US exchanging nukes, everyone that had them used them, all of them. Sam Nunn and Richard Lugar finally had their way, their were no more nukes, hence no reason to continue the Nuclear Threat Initiative (NTI). No one would have the capacity of building nuclear weapons for the foreseeable future.

We had the choice and the CCTV camera atop the OP had survived so we stayed sheltered. The twice daily trips to the barn to gather eggs and tend to the livestock became high points for the kids. The final decision was to wait until the outside radiation fell below 50mR/hr. This was roughly half the maximum exposure rate of 104mR/hr. Our assumptions about the radioactive decay, taken from the spreadsheet, were supported by our equipment. We were in for a stay of 14 months.

Lori and I had all the necessary equipment from Approved Gas Masks including suits that the twins would have to grow into, masks in available sizes for everyone with spares and so forth. We bought the filters directly from MSA, a large, expensive order. We had suit tape, duct tape, surgical tape, magic mending tape and masking tape, a full shelf full. The masks were only good for 8 hours use and I bought them by the pallet.

We also had QuikClot, HemCon, Celox, Biolife, BurnGel, LSP Burn Dressings... I could go on for a full page and miss something. One assumption was that if you play with guns, you'll probably get shot by the guy you're shooting at. Rather than guess which clotting agent was best, we bought several. I personally favor the QuikClot ACS+ sponge. They were available in several sizes.

What worried me most was that people would come out of their shelters, assuming everyone not sheltered was dead, and would begin searching for those supplies necessary to maintain life. We had those supplies and while we hadn't set aside any humanitarian aid, could spare some. Especially if they'd take beans, rice and masa. We wouldn't be forced into doing anything we didn't want to do, so they'd better not forget to say please. The freezers were not full but well stocked. We had the LTS in abundance plus the STS and the home canned food.

We were now unemployed for the foreseeable future and our activities would be limited to guarding our home turf and seeking out additional supplies of essentials, primarily diesel, gasoline and propane. With the PV panels and large battery banks, diesel fuel for the generators wouldn't be the priority it typically was in situations such as these. We had PRI-G and PRI-D stored because TOM recommended it so highly. We'd bought it in one gallon containers for ease of use although it would have been cheaper in five gallon pails or 55-gallon drums. It was stored in the barn basement.

When the radiation level fell to 100mR/h, we had to cave in and let the kids out to avoid them driving us crazy. We took advantage of the time and spent 2 hours on the firing range. They were free to spend the remaining 2 hours in the singlewides. There was a lot of foot dragging when the 4 hours were up.

Jillian and Juliet proved to be quite adept with the .22LR rifles and there was some discussion of moving them to the 5.56 rifles in short order. They're about the same caliber and the recoil of the 5.56 platform isn't really that bad. With those M68 sights (CompM4), they shouldn't have much trouble. The main point would be to emphasize to not use full-auto unless instructed.

"Where did that come from?"

"Where did what come from?"

"The M855."

"Oh that. It was on sale and I sort of got carried away. It is loose packed 1,000-rounds per case. I figure what the hell and bought 20 cases. I got 10 more cases of M118LR from the same source, Lucky Gunner. It only arrived 2 days before Russia attacked and I forgot to tell you."

“It might come in handy in a post-World War Three situation.”

“Post-World War Three? Pull your head out; the war with China was World War Three. The Russian attack was World War Four and Einstein was wrong when he said, *I do not know how the Third World War will be fought, but I can tell you what they will use in the Fourth – sticks and stones!* World War Five, although unlikely, might be fought with sticks and stones... if we run out of ammo.”

“This levee, while a very good idea, is going to attract attention.”

“I know; that’s why I bought the extra ammo.”

“World War 6 or 7?”

“What?”

“TOM talks about his characters accumulating more ammo than they need. In some of his stories he described quantities by the number of wars they could fight.”

“I see what you mean. It’s hard to say since we haven’t been attacked yet. We have in excess of 100,000-rounds and enough components to reload each case 4 times. That puts the total at ½ million rounds. How much did you shoot up in Iraq?”

“That’s not a fair comparison because I was a Designated Marksman and probably shot more than the average Soldier or Marine. I think I probably shot less than 1,000-rounds.”

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Authors Note: The only time Derek fired his M4 in Iraq between 10-05 and 10-06 was for proficiency. They were assigned as convoy escorts, ergo MPs. His HMMWV had one of the first CROWS systems in Iraq. Not only was his HMMWV Up Armored, they had additional armor in the doors. The space below the windows where one would normally lower the window into was filled with a second window of bullet proof glass.

He recently had a tough decision to make, reenlistment. The word that came down was that if he reenlisted, he would make Sergeant First Class, but... he would have to do a tour in Afghanistan. It turned out that another group was already in training for the mission and he wouldn’t have to go. He’s reenlisting for 3 years to get his 20. Que Sera, que sera.

My characters always have more ammo than they need because I follow the philosophy of would you rather have it and not need it or need it and not have it. I gave all of my firearms and ammo to Derek mid-June. The rifle gained about 12 pounds since I bought it and I haven’t added a thing.

And, he departs for Afghanistan on 1APR14.

To answer 2 questions, did I have any 20 round magazines for my M1A? Did I really have a PT1911B? Without admitting anything, I can truthfully say, I don't have those things now.

End Note.

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It didn't take long to decontaminate around the buildings. The pasture seemed to be an exercise in futility. When the AMP 50 readings fell to acceptable levels, we called it good. Next on the agenda was fuel. To this point in time, we'd been off everyone's radar. While there had certainly been EMPs caused by the weapons used against the US, there had been no indication of a HEMP attack.

Uncertain of which weapons would be the best choice for our first outing, we selected our MBRs, ARs, shotguns and 2 handguns each with all of the magazines loaded to capacity. We weren't short on magazines or the ammo to load them. We took a portable generator and fast battery charger when Jake, Hank and I set out to find diesel tankers. What we really wanted to do was find a distributor who would have large supplies of diesel, kerosene and gasoline and a propane distributor or two with large tanks.

It would be even better if we could find some of the 1,100 gallon tanks or larger. Our first success was a tanker with two tanks filled with nothing but diesel at a truckstop. We finally got it running along with a second tractor attached to a pair of empty tankers. We checked and we'd need a 3 phase generator and a lot of patience.

On the way home, we spotted a Ferrellgas location and made a note to come back. We had to make the note ourselves; Velda died on July 17, 2006, the same day that her boss Mike Hammer died.

While Carol took Tom and Charlie to pick up 2 propane delivery trucks, Hank and I searched for a heavy duty 3 phase generator; finding a trailer mounted one in Tiptonville. We returned to the truckstop and hooked up the generator allowing us to use 4 pumps to transfer the diesel fuel back to the second tanker. When we pulled in with the second load and the mobile generator, Tom, Charlie and Carol were back. They had bought 5,000-gallons of propane, emptying the tank.

"How much do you figure the tank holds?"

"Don't have to figure, it was labeled. That there's a 20,000-gallon tank."

"Could we move it here?"

"If we could find a heavy duty crane to lift it and the stands plus a flatbed semi to haul it, we probably could."

“Do you think we could find some propane to refill it?”

“We’ll check the Yellow Pages for AmeriGas or other Ferrellgas locations. How’d you do on diesel?”

“We transported a total of 32,000-gallons at 8,000-gallons per tanker. That should last a long while. Near as we can tell, the tanks at the truckstop were over half full.”

“Did you stick ‘em?”

“Yes we did. The problem is we don’t know how large the tanks are, only that they are half full. That should last us a long time. We have some other priorities at the moment. First off, we need to check on the guy who reloads our ammo. He gave us a list names in case he wasn’t available. The components for reloading are stored in the barn basement.”

“Where do we stand on ammo?”

“Lori and I have at least 100,000-rounds. I didn’t count yours.”

“World War 8, huh?”

“I didn’t know you read his stories.”

“I didn’t used to; bought his CD along with Jerry’s. Lots of information. I did that right after you told us about the Rule of Threes.”

“And?”

“Jerry has an underlying theme but different disasters, most of the time. TOM usually winds up preparing before the events and almost always buys too much ammo. He likes the GTW theme, doesn’t he?”

“Did you read their backgrounds at E-Bay when you bought the discs?”

“Was that Cuban Missile Crisis that big of a deal?”

“I assume it was; it scared them half to death.”

“That was when Wiki was still up and I looked it up. Kennedy got darned lucky not invading Cuba.”

“Yes he did. We had an intelligence gap and didn’t know they had tactical nukes.”

“Does anyone have nukes now?”

“They probably do in their enduring stockpiles of retired weapons. I figure, Russia, the US and Israel probably have some left. I doubt we’ll have to worry it about since the exchanges went on for 3 days.”

“So, we just have to worry about the local hooligans and the ne’re-do-wells (A dim-witted person that hangs around others begging for a free ride. Avoids any real work, fails at anything they do and rides the coat-tails of others.)?”

“Them, the scroungers and the brigands.”

“Aren’t hooligans and brigands the same thing?”

“Well, they’re both criminals so it would be fair to lump them in the group.”

“How are we going to handle them?”

“We won’t let them get close enough to be any real trouble. We’re not short on sniper rifles and have Assault Rifles to repel assaults.”

“Between you and me, I much rather have a couple of heavy machine guns and a couple of medium machine guns.”

“You don’t want a Mark 19 Mod 3?”

“The heavies could be one Ma Deuce and one Mark 19.”

“Know where to get them?”

“You know, I just might. Let me think on it.”

I was thinking Fort Knox. But, the armor units were moved to Ft. Benning in 2010 and Ft. Knox became a training command. That was ok; they had to have weapons to do the training. The only thing we didn’t know was whether or not Russia had targeted the Fort as a counter-force target or the gold depository as a counter-value target. It would also be a logical supply point for the Kentucky National Guard.

“We don’t have to go far. The Department of the Army, Kentucky National Guard Wendell H. Ford Regional Training Center & Kentucky UTES is located in Muhlenberg County. They should have what we need. If they don’t, we could always try Ft. Knox.”

“When?”

“How about the five of us do a recon on this coming Monday?”



“Why don’t four of us make the recon, two men and two women, all from different families?”

“Do you want to take the semis?”

“I think ten ton or five ton trucks could haul everything we need. If not, we can always make a second trip for additional munitions.”

“What are you two talking about?”

“Heavy weapons and munitions. My first thought was Ft. Knox, but Jake suggested the Department of the Army, Kentucky National Guard Wendell H. Ford Regional Training Center & Kentucky UTES is located in Muhlenberg County with Ft. Knox as a backup.”

“Men!”

“Why did you say that?”

“Ever heard of Ft. Campbell? That’s the closest and it’s the home of the 101<sup>st</sup> Airborne Division (Airmobile).”

“That’s a regular military base. Assuming it wasn’t hit as a counter-force target, it’s probably crawling with airborne personnel.”

“So, do a recon of Ft. Campbell instead of the other locations. What do you have to lose?”

“If there are troops there, our lives.”

“You don’t have to get that close; use the spotting scopes. It should be you, Hank, Carol and me making the trip. Jake, you’re the second best qualified and should stay here. Since we don’t have children, both Ben and I should go. Shelly might be a better choice but she’s married to Hank. We can take 2 of the heavy rifles and an M-25 plus our ARs and shotguns. Anything you guys can do, we can do as well.”

At least she didn’t say *Anything you can do, we can do better.*

## Earthquake – Chapter 14 – Salvaging

We left for Ft. Campbell around 2am with intentions of being in place before dawn. When we arrived, we split into two teams, each couple equipped with 7.62x51mm rifle and one heavy rifle. In this case, the heavy rifles were the Tac-416 and Tac-338. We also had our primary and backup pistols along with our ARs.

There wasn't a single light showing and we had to use the AN/PVS-27s to see. We stayed in contact with business band radios; we all had one with the combined ear-phone mike. We were right on the edge of the post. Sunrise temporarily blinded us because we were on the west side looking east.

The problem with Ft. Campbell is that it's not a uniform shape. On the west side, it runs north and south somewhere between 10 and 15 miles. Along the Kentucky-Tennessee border, it runs east and west about 20 miles. The west section in Kentucky is pretty much a ragged square and the Fort narrows further east. On the north border at the east end, another, smaller ragged square maybe 9 square miles pokes its nose back into Kentucky. The majority of the Fort, however, is in Tennessee. Hank said the Fort covered 102,414 acres.

After the sun raised enough to be out of our eyes, we surveyed the situation and didn't see a soul moving. The Fort headquarters were on the east and if we were likely to find anyone, we had to skirt the southern border and check out the east end. We returned to the Suburban, had breakfast and headed east, very slowly and very carefully. I watched forward, Hank right, Lori to our left rear and Carol to our right rear. There were some indications of movement but nothing we could pin down.

We picked up US 79/Tennessee 76 for most of the trip. We cut up on Purple Heart Parkway to get to US 41A. We set up for the night at Bethel College on Jack Miller Boulevard. That turns into Lee Road on the other side of 41A, Headquarters Fort Campbell.

After supper, we cleaned up and got some sleep because it had been a very long day. Regardless, we were up by 0600 and eating Mountain House breakfasts. Between the hot food and the Taster's Choice instant coffee, we were ready to resume the recon after a bathroom break. Lori had discovered Minimus.bis and stocked up on a lot of individual servings of condiments and drinks. Swiss Miss and Taster's Choice had been two of her selections.

With all of our chores attended to, we found the highest building and moved to the roof. While we couldn't see all of Ft. Campbell, we saw enough to lead us to believe the place was deserted. The entrance had a locked gate with trash blown up against it on the inside. There was really no way to tell where the 101<sup>st</sup> was, but it wasn't here. Nevertheless we kept watch until late in the afternoon before attempting to enter the Fort.

The bolt cutters wouldn't cut the lock, but they sure cut the chain, letting us in quickly. I grabbed a Master lock and locked the ends of the chain back together on the inside. It didn't take all that long to find a headquarters building where we could put up for the night. Everyone was hungry so we each took a Hungry Man MRE and brewed a pot of Folgers.

After supper we snooped around a bit and found a map of the Fort indicating armories, munitions bunkers and the motor pool. Early the following morning, after confirming we were alone at the Fort, we started with the Motor Pool and picked up 2 10-ton trucks and fueled them. While we were at it we filled a trailer each with JP-8 and then, headed for the armories.

Of course, they had more than one and it took a while to find what we were looking for. And when we did find what we were looking for, it was a bonanza. We limited ourselves to 2 M2A1 with the quick change barrels. We found the Technical Manual and the tools needed to set the headspace and took several more barrels. They had pintles, so we took 2 tripods and 2 mounts that we might be able to mount in the beds of 2 pickups. The Mk19 Mod3s had apparently just been serviced and we took 2 of those as well; and, went back and got 2 more tripods and 2 more mounts.

When we got to the M240Bs, we sort said *what the heck* and took four with their spare barrels, extra barrels, M122 tripods, pintles, mounts, the Technical Manual and the tools. Next, we went looking for the ammo and found what we weren't looking for long before we found what we were looking for. We found M72A7 LAWs, a few M136 AT-4s and every kind of hand grenade the military used. We loaded them up and stopped for lunch, splitting a pair of the Hungry Man MREs among the 4 of us.

After a bathroom break we resumed the search, finally finding the .50BMG tactical belts containing the 4:1 mix of AP and APIT. That pretty much finished out the first truck and we started the second by loading belts of 40x53mm grenades, primarily HE and HEDP with some belts of canister and practice thrown in for good measure. We also found Mk285 40mm rounds but didn't take them because we couldn't find an Mk47 Mod0 automatic grenade launcher. The Mk285 were smart programmable 40 mm shells that could be set to airburst. We found more than enough 100-round belts of 7.62x51mm 4:1 mix of ball and tracer.

The only sniper ammo we located was the M118LR and the Mk211MP. We took every piece we could carry. When it was all said and we were done, the 2 trucks were overloaded by weight although not in volume. A comment on the pindle mounts. What we found weren't the ring mounts but the posts that accepted the pindle from the bottom of the weapon. We weren't really sure that those would work well with the heavies because when they filmed Rambo IV, they had a .50 mounted on a truck bed and it ripped loose when it was fired. We could always use the tripods, but they we have to be set in place in advance.

With the trucks overloaded as they were, we took our time getting home, not arriving until after dark. We radioed to let them know we were about ½ mile out so they could open the flood gate. We were too tired to even think about unloading so we had supper and hit the hay.

The next morning, Hank, Carol, Lori and I slept in, not getting up until 8am. One of the trucks was unloaded and they were well into the second.

“Big boy toys.”

“We did our best to get what we’d need. I hope and pray we don’t need it.”

“Don’t jinx us by saying that! Just be glad we have it and they don’t.”

“Have anyone in mind when you say they?”

“Sure do. The people on the outside of the levee. I think we should place the M2A1s north and south and the Mk19 Mod0s on the east and west. We’re more likely to be attacked from the road Ben.”

“You can put an M240 on a tripod at all four locations. We’re short of defenders so the teens are going to learn to shoot those M240s.”

“We have 10 adults, what do mean we’re short?”

“Would you rather have the teens on the sniper rifles?”

“They are all teens now and counting them we have 16 defenders. The only two that aren’t 100% yet are the twins since Téa wouldn’t let them start shooting when they should have. Nonetheless, they do pretty well with those Bushmasters.”

“I sure wish we had enough main battle rifles to go around along with a few thousand rounds of surplus.”

“Anything in particular? You seem to favor the M1As.”

“I really prefer them; that’s why we have 4. The effective range with iron sights is 500 yards and with optics 800+ meters. We mostly have CMI 20-round magazines. They make a 25-round but I was leery about the springs in those. Beta-C makes those 100-round dual drums but from what I’ve read, they aren’t reliable. There’s a company named XS-Products that brought out a 50-round single drum in 2012. They’re an aluminum bodied, single stack magazine that is ceramic coated and all parts are aluminum or steel.”

“Well, two of the other main battle rifles are M1As.”

“Right, we’d only need 10 more assuming we could find them. However, I’m focused more on caliber than brand and we actually do have one DSA STG-58, one standard model M1A, one PTR91K and one Loaded M1A in addition to the two M-25s and our two Loaded models. That cuts what we need down to 8. I’d sure like to replace the FAL and the PTR since it would eliminate problems with magazine interchangeability which gets us right back up to needing 10. The ARs are all semi-full like the M16A1 and have gas pistons.”

“Want to go to Geneseo?”

“Not if we can avoid it. Besides, I don’t know where those 50-round drums are manufactured.”

“If anyone had everything in a single location, it would be Impact Guns.”

“Don’t count on them; their locations were West Salt Lake City, Ogden and Boise. Geneseo would be closer. And their 20-round magazines are made by CMI. As for mounts, scopes and other accessories it will probably be catch as catch can. I think it’s about 400 miles due north to Geneseo but we’d be passing east of St. Louis.”

“We could do that in 2 days, tops. One day up and start looking; the second day loading up and retuning home. I’d be inclined to get top of the line rifles with synthetic stocks with bipods and mounting studs. We could get a few of those all-in-one tools, a flash-hider alignment tool, slings, cleaning kits and magazines. I’d prefer air gaged match barrels, either 1:11 medium weight or 1:10 heavy weight.”

“Those black barrels would be nice.”

“True but we could either get them parkerized or paint them flat black.”

“When?”

“Let’s get the rest of this stuff unloaded and placed or stored. Is the first of the week ok?”

“Works for me.”

We spent the remainder of the week emplacing our weapons squad in positions inside the parapet. We placed the Ma Deuces on the east and west sides and the Mk19s on the north and south sides after further reflection. This would allow the Ma Deuces to fire north or south. The original 40 acres would have been a nice space for housing development. Forty acres were 1,742,400ft<sup>2</sup>. The home dome covered ~2,828ft<sup>2</sup>, the barn dome another ~11,310ft<sup>2</sup> and the extra deep 3 car garage ~864ft<sup>2</sup>. The levee had a 45° slope and was 24’ high and 48’ deep, another ~190,080ft<sup>2</sup>. The four single wide homes were 14x70 being older models and covered another ~3,920ft<sup>2</sup>. The driveways were about 16’ wide and graveled and I guess we had maybe 500’ of roadway, another

~8,000ft<sup>2</sup>. The grand total of used space was ~270,000ft<sup>2</sup> out of the 1,742,400ft<sup>2</sup>, meaning ~1,525,400ft<sup>2</sup> or 35 acres was sitting there unused.

If we went with TOM's idea of an intentional community consisting of 14x70 singlewide homes and made space 28' wide and 94' long to accommodate a yard and roads, we'd have space for 580 homes. Taking it one step further and assuming an average 4 person per residence, it would amount to 2,320 additional people. Not even TOM did things on a scale like that.

*My mama always taught me that good things come from adversity if we put our faith in the Lord.*

*We couldn't see much good in the flood waters when they were causing us to have to leave home,*

*But when the water went down, we found that it had washed a load of rich black bottom dirt across our land. The following year we had the best cotton crop we'd ever had.*

*I remember hearing:*

*How high's the water, mama?  
Two feet high and risin'*

*How high's the water, papa?  
Two feet high and risin'*

Everyone has heard Jonny Cash singing that at one time or another. Again, Fulton County is the lowest spot in Kentucky and that is why we spent three years building the levee. Never experienced a Mississippi River flood personally, but I've seen pictures. Sometimes, the river was miles wide. Record floods had occurred in 1927, 1965, 1973, 1993, 2007, twice in 2008 and again in 2011. We were overdue and it was beyond our control, all in Mother Nature's court. Yes, we lived here in April and May of 2011, and the Mississippi flooded in our area, just not on our property.

That was part of the incentive to build the levee. Now the question was did we build it high enough? We were low, but above the normal water level of the river by several feet. The levee essentially doubled our elevation above the normal river level, so call it 50'. The closest monitoring site the government used to have had been located in Clinton, Kentucky to our northeast.

From time to time, someone would show up looking for a handout. We usually offered to barter. In those cases where it was a full family with starving children, we'd cobble together some humanitarian aid packages and offer the parents work. With few exceptions, the parents accepted the offer of work and we'd put them up in one of half dozen singlewides we'd located, towed and installed inside the levee.

We did a lot of salvaging (reclaiming) and scavenging (rummaging through trash) as time passed. We weren't parasites or we could have also been called scroungers. In addition there was no reason to loot with so much abandoned property lying around. We did find more PV panels when we went looking outside our home area. We typically found inverters and charge controllers in the same locations. Rather than building a huge intentional community, we devoted a large area for a solar array.

We needed more submarine batteries to store the extra power and didn't come up with any until we took a trip to St. Louis. Using the Yellow Pages, we got the addresses of several firms that pre-war had dealt in solar and wind. In the beginning we didn't find any batteries or PV panels, only 10-35kw wind turbines with various outputs. We took those that output 48vdc and the towers to get them up into the wind. We had 2 semis and didn't have any problems locating 2 flatbeds and hauling the wind equipment home.

There is something to be said for persistence and we eventually found 48vdc 300w PV panels. The company had a huge warehouse and from the looks of it, had gotten in shipments of both PV panels and submarine batteries shortly before the war. The panels were on pallets and a clipboard on one of the pallets indicated someone was checking them off the list. We took the batteries home next, together with a significant number of cables.

Tom and Jake stayed on, loading the PV panels into a box trailer along with the combined inverters/charge controllers. When we returned to pick up the load, they had everything loaded in two 40' box trailers and were working on a third, loading stands for the solar array. We hung around until everything was loaded and headed home.

"What's that?"

"What's what?"

"It sounds like gunfire."

"Hang on. Lori, this is Ben. SITREP?"

"We're taking fire but these people won't last long, those machine guns are mowing them down."

"We're only a mile out, suggestions?"

"Just wait until we sweep up the trash. We'll let you know when it's safe to continue."

"Now what?"

"Now we wait for them to let us know the coast is clear."

“Shouldn’t we be helping?”

“Well, think about it, everyone at the levee is a target for them. They have enough equipment and training to handle anything up to a Company sized unit, depending on how they’re spread out. We only brought one M-25, the TAC-338 and Tac-416 so they have 2 sniper rifles and most are qualified snipers at ranges of 1,000 meters out to 1,500 meters. We need to stay out of their field of fire lest we become targets ourselves.”

“I don’t like it.”

“I don’t either, but that’s just how it has to be.”

“Ben, Ben.”

“SITREP Lori?”

“Come on home but be careful we haven’t checked the bodies yet.”

“Do you want us to do that?”

“Would you, please?”

“No problem.”

A Ma Deuce leaves a hole and a hit in most parts of the body are very serious, usually fatal. The Mk19 sometimes only leaves part of a body to dispose of. The M-240, being a rifle caliber, doesn’t tear up a body as much, depending. The 5.56 round, at the velocity generated by a 20” barrel, frequently tumbles with the M193 ammo and not so much with M855. The 55gr M193 reaches higher velocities and become unstable when it hits the target. The 62gr M855 has lower velocity than the M193 and due to the shorter barrels the US used, went straight through frequently causing little damage unless hitting a vital organ.

Our first pass though consisted of putting the wounded out of their misery; we didn’t have a hospital to get them healthy so we could shoot them or hang them. The second pass though we collected firearms, ammunition, magazines, knives and other weapons. We dropped the trailers inside the compound and hooked up to a flatbed trailer. The bodies were loaded on the trailer and hauled off somewhere; Jake and Hank never said and I didn’t ask.

We set the extra 4 battery banks up in the barn dome basement and filled them with the acid and connected them to the banks of inverters mounted in 19” relay racks. Stage 2 was installing the wind turbines and hooking them into the charge controller connections



to get an initial charge on the new battery banks. Stage 3 consisted of installing the solar array stands and the panels. And finally, stage 4 saw us connecting the panels in parallel and connecting them to the charge controllers. While we installed all of the stands we brought back, we only installed half of the panels keeping the remainder in reserve for the next disaster.

Yes, next disaster, we've only had 7 and that counted in the Israel/Iran thing. We even had my bottom of the list thing, an asteroid strike and my next to the bottom of the list thing, a GTW. It appeared to me that what we faced were the Mutant Zombie Biker hoards attacking. Therefore, like it or not Geneseo, here we come. Maybe we could do that with three of us, one as lookout and two to search.

Other than boxed rifles, it would be difficult to identify the various rifles. The Standard model, the Loaded model and the National Match model had 1:11 barrels. The Loaded and National Match barrels would be heavier than the standard barrel since they were medium weight. The Super Match would have 1:10 with a fixed stock and the M-21 would have 1:10 with an adjustable stock. Surely the M1911s and XDs would be marked indicating model, etc. Springfield Armory was one stop shopping.

## Earthquake – Chapter 15 – One Stop Shopping

It proved to be almost exactly 350 miles to Geneseo. Hank, Lori and I made the trip and eventually located the business. It was locked up tighter than a bank vault and just getting inside was our first challenge. That's why God invented cutting torches, I guess. We did that in broad daylight and left to come back after dark. We did keep the entrance we opened under constant surveillance. We had 3 reasons to do the surveillance. One, we wanted to be certain in our minds that the facility was abandoned; two we wanted to be certain that our activities hadn't been observed; and three, we wanted to be certain that no one else discovered the now open entrance.

Around 9pm, we entered the building using red filtered flashlights to see. I had a list of their model numbers for the rifles, 1911s and XDs. We first looked for boxed firearms and found 2 SA9121 M-21s with the Douglas barrels and walnut stocks. The next items were the Super Match rifles with synthetic stocks. We found 2 SA9805 Stainless Douglas barrel Marine Corps Camo stocks and 4 SA9804 Stainless Douglas barrel with black McMillan stocks.

When we checked the firing room where they test fired the rifles, we found 2 more of the SA9804s. We had our 10 rifles. However, the price was right and we kept shopping, ending up with 15 SA9226 Loaded models. Lori hadn't seen anyone and said she'd check for magazines and 3<sup>rd</sup> generation scope mounts. She didn't much care for the 4<sup>th</sup> generation mounts. While she did that, we gathered up 36 M1911s. I didn't care for the XDs and Hank said to forget them.

Lori had gathered up every M1911 magazine and every M1A magazine. Elapsed time was 2 hours. If we left for home immediately, we could be home in about 7 hours, give or take. The give or take had more to do with who we might run into than the distance. Still, we all agreed to get out of Geneseo pronto.

So a little after midnight, we found a place to hole up until daylight. We took turns keeping a watch with 2 hour shifts. About 6am we took a bathroom break, washed up with Purell and heated water for coffee/tea and our Mountain House scrambled eggs and ham breakfasts. After a second potty break, we headed south. At least we didn't arrive home to find it under attack.

When it came time to pass out the firearms, we started with the best rifles and handguns and worked our way down on the basis of who shot the best. My 4 fellow Rangers and their wives came away with an M-21 or Super Match and Lori had picked up Springfield Armory leather cheek pieces and slings. She also had those CMI mags that CMI made for Springfield Armory, several cases worth.

The younger people had to settle for Loaded models but they had scope mounts and slings. We'd passed 3 gun stores on the way home and had Leupold Mark 4 ER/T 4.5-14x50mm (30mm) Front Focal riflescopes and some Mark 4 LR/T 4.5-14x50mm (30mm). The only thing we lacked was suppressors to protect our hearing. Lori pro-

duced enough Surefire FA762K suppressors to handle the rifles and a pile of the muzzle break adapters. By now I was used to her handing over whatever we needed when we needed it. I didn't ask, I just passed them out along with flashhider alignment tools and the toolkits she picked up in Geneseo.

The old saw is, *never look a gift horse in the mouth*. I assumed that all that was missing was for her to show up in blue tights and shirt with a big white S on a red field on her chest and a flowing red cape. I knew some of her money came from the Trust and I also knew that she'd spent a lot more money than was in that Trust. Never mind her Larry Edelson investments, she had earned money from somewhere else and had told me, *don't ask*.

Whatever her source of money was, it had dried up with the coming of the war. With the coming of the war, we men were out of jobs and underfoot the entire time. Plus the population of Tiptonville had fallen to zero. Those not killed by the radiation, the bad weather and starvation had apparently moved on. Except for the raiders we knew had to be out there. They'd attacked once and another group was sure to attack in the future.

That levee was like a sign screaming *here we are, come and get it*. And, if there was any doubt at the outset, the 3 stands of concertina on top of the levee emphasized the sign. All they had to get by was 2 M2A1s, 2 Mk19s, 4 M240B and some rockets and other ordnance.

I mentioned preserving the well on the 2<sup>nd</sup> 40 acres for irrigation. It was a smaller 4" well; smaller because the people who previously owned our 40 acres had had a 10" well. No, I don't know why they had the 10" well drilled as opposed to a 4" well. It was really a deep well, something on the order of 120'-150'. It had a cistern that held 5,000-gallons that I had mistaken as the well head. I'm a Ranger, not a plumber, get over it. When I ran the water lines, I cut the power, closed the hand valve and hooked in a homemade adapter using a stub, a Tee, 2 90° elbows and connected the pipes up. Oh yeah, Teflon tape too. According to the literature, we had an ITT Gould VIS submersible pump and it was about the smallest industrial pump they made.

We still lacked depth with only 10 adults and 6 youngsters from early teens on up. We'd done some additional salvaging beyond the fuels, electrical needs and ordnance. We'd cleaned out all the smokes wherever we found them. And staples; and, anything else we found that we concluded we had a use for. Our reloader wasn't from Tiptonville per se; he had a Tiptonville address but lived on a farm. It didn't take much to persuade him and his wife, Marilyn, to move to our little enclave. This time, we got a nearly new singlewide and made arrangements to move his reloading equipment and supplies to the barn basement.

He was like that hick farmer in *Dominic Santelli*, an amateur radio operator with a very good set of radios and a 5 section heavy duty US Tower crank up tower and said it was 89' plus the antennas on top. He had a single rotor that turned uhf, vhf and hf beams and the vertical mounted on top. Before they'd move, he wanted the antenna installed.

We compromised by letting him use Lori and my rigs. Collapsing and moving the tower was easy... pouring a footing and creating new mounting brackets, not so easy.

We had to dig down the side of the tower foundation to determine the depth of concrete needed and fashion our own brackets to attach the tower to the foundation after the concrete cured. US Tower had 3 locations; 2 in the US, California and Kansas and 1 in Lanseria, South Africa. There was no way US Tower could help us with our problem. We added an extra foot of concrete, just in case.

The vet that Lori used for the livestock, especially the horses, had disappeared along with most of the other Tiptonville residents. She'd been with him every time he'd done anything to or for the horses and felt she could handle the vet chores herself. Rather than continuing shoeing the horses, she opted for the natural approach, trimming the hooves and using leather hoof boots during the transition period.

Within the natural hoof care philosophy, the term barefoot horses refers to horses which are kept barefoot full time, as opposed to horses who are fitted with horse shoes. The hooves of barefoot horses are trimmed with special consideration to a barefoot lifestyle. The barefoot horse movement advocates a generalized use of barefoot horses, both in non-competitive and competitive riding, often coupled with a more natural approach to horse care. Keeping horses barefoot is seen in many parts of the world, including South America, Mongolia and other industrialized and non-industrialized cultures.

One night, maybe 6-7 weeks after we had the new radio tower in and Robby and Marilyn settled we had visitors around 2:30am. We had an assortment of night vision for the heavy weapons, mostly 4X and 6X ITT Raptors. We also used a 6X as a nighttime spotting scope. Tom had the duty and when he was relatively certain, he triggered our alarm system. It consisted of a series of old fashioned doorbell ringers that could be activated from the OP. SOP required everyone to check in with the observer and get instructions. We were instructed to turn out with our MBRs and sniper rifles.

"What's up?"

"Visitors. I make it somewhere between 15 and 20 so we have them outnumbered. I suggested we used the suppressed weapons and turn them around before they get close."

"Any idea what they want?"

"You don't make social calls at 2:30am. From what I could tell, they're all armed and wearing LBE. I only saw small arms but they could have explosives and maybe rockets."

"Give it a couple of minutes for everyone to get in place. Let's hold off on the heavy weapons unless they're really needed. There's no sense in announcing our capabilities."

I sure wish we had some of the AN/PVS-10 12.2x Day/Night Weapon Sights. Of course the best choice would be a MUNS mounted in front of a variable power scope.”

“Hank said he saw some at Fort Campbell. Didn’t he say anything?”

“They weren’t really on our shopping list. We should have looked for other night vision like the AN/PVS-14s.”

“Yeah, plus helmets and Interceptor body armor.”

“Might be ok for static defense, but all that weight starts to add up. On the other hand MICH helmets with the AN/PVS-14s mounted would give us a real advantage.

“Everyone here? Ok, Tom says we have a group of visitors somewhere in the range of 15 to 20. We’ll start with sniping and if they manage to cut through the concertina, open up with M240s. Tom, pop a parachute flare when the OpFor is in position.”

“Gotcha.”

I had my M-25. They were maybe 200-250 yards from the parapet on the barn dome and we could look down on them. Everyone held their fire until Tom launched the flare which caught them in the open and totally unprepared. It was like shooting fish in a barrel with the battle lasting all of 3 tense minutes. Tom kept the area lit with a succession parachute flares. When we no longer were getting return fire, Tom, Jake, Hank, Charlie and I passed through flood gate to do the cleanup. I was carrying my AA-12 with a 32-round drum of 15-pellet.

I never got a chance to fire; the fellas were ahead of me and made certain there were no survivors. Lori drove out one of the pickups and we loaded up the weapons, ammunition, LBE and anything we could find of value. We stacked the bodies after deciding to wait until daylight to move them somewhere away from the compound.

That somewhere turned to be just outside Fort Campbell. And, since we were there, we picked up the items discussed earlier that morning. It took a while to find the helmets, vests, plates, AN/PVS-14s and AN/PVS-10s. However, since we were there and knew where the Motor Pool was, we added additional fuel trailers to the Up Armored HMMWVs we borrowed. We also took a 10 ton truck with a large quantity of spare parts and tires. It pulled a larger tanker than the HMMWVs pulled.

While we didn’t really need any more ammo, and had taken all of the good stuff on our previous shopping trip, we collected more 12 gauge rounds, especially breaching rounds and some FRAG-12s we’d missed. The breaching rounds are made of compressed powdered metal and are frangible, powdering on impact. The US Military M1030 breaching round, a 12 gauge 2¾ inch (70 mm) shell uses a 40 gram (1.4 ounce) projectile made of powdered steel, bound with wax.

The long arms collected from the 17 men and 2 women included 5 AR-15s, 2 M4A semi-full carbines, 3 bolt action rifles in .30-06, 3 SKS, 2 M1As, 2 Remington 870 riot guns and 2 model 1895 Marlin Cowboys. There were 2 well used Colt Artillery models in .45 Colt, 7 M1911s, 4 Browning Hi-Powers, 3 Glock model 17s, 3 Glock model 21s and one Glock model 30 in an ankle holster.

Collectively they had 6.5 ounces of gold and several rolls of pre-65 dimes and quarters with the Cowboys also each having a roll of half dollars. Their ammunition was military ball .45acp, military ball 9mm, ~250 rounds of .45 Colt Cowboys loads, ~1,200 rounds of M193 on stripper clips, 215 rounds of .30-06 in various bullet weights, 226 rounds of 12 gauge 9-pellet 00, 71 stripper clips of 7.62x39mm and 7 battle packs of 7.62x51mm South African 147gr FMJ surplus. We cleaned two of the M4As and gave them to the twins together with 2 of the Browning Hi-Powers. The balance was added to the armory.

I'm sorry I didn't give you a list of the weapons, ammo and other things collected from the first group that attacked. They were simply too many different weapons in different calibers to list. We did pick up a nice collection of knives running from Spyderco Harpies to Cold Steel Laredo and Natchez Bowies. One person had one of the 101 Gil Hibbens handmade Damascus RIII knife and I claimed it immediately.

I have to tell you that that attack was the last attack. If we added the 2 attacks, 7 became 9 and we'd apparently reached the limit. God help us if we didn't  $3^3 = 27$  and  $3^4 = 81$ . As time passed, we added a few families but never more than we could feed. When the electrical demands outstripped our capacity, we mounted the remaining PV panels and inverters/charge controllers. The lowest the battery banks ever dropped turned out to be a 92% charge. When that happened we got out the brooms and cleaned the snow off the panels.

One of the new couples were school teachers and we pulled in a double wide portable classroom. We made a trip to Tiptonville and collected school books for all 12 grades. With the passage of time, Lori's herd grew and she began raking in good money for the horses. They were all broken to saddle and harness and a group of Amish was selling buggies, wagons and saddles.

We still get the occasional aftershock from the 2011 earthquake. I believe it could have been worse had not the asteroid struck New Madrid County and released much of the pent up strain.

We're now some 10 years post WW IV and the government has yet to show up. Maybe that's just as well, they didn't screw-up anything. There's enough food being produced in the area that we don't want for anything. Someone is even growing citrus crops in a greenhouse and coffee trees in a second.

We've done more salvaging and have a lifetime supply of Charmin, Kleenex, paper towels and feminine hygiene supplies. We took a semi trip and collected every carton of

cigarettes, cans of pipe tobacco and boxes of cigars we could find. We keep those in climate controlled storage. We did the same with liquor and Charlie took up home brewing and produces a fair lager. He claims the secret is in the yeast he uses. A home brewing store provided the yeast, caps, brown bottles and a capper. He went through their records and located a cap manufacturer and a bottle manufacturer and his fortune is made.

Fiat money is a thing of the past with pre-65 silver coins and bullion coins taking the place of the Federal Reserve Notes. Since the FRNs are backed by the full faith and credit of the non-existent US government most people use them to start fires.

While we've collected what should be a lifetime supply of the various fuels, we've also located and installed wood burning stoves, just in case. Products Research, Inc. never resumed production and the PRI products do have a shelf life. That has made the production of biodiesel and anhydrous ethanol critical.

I'm going to finish this up, it's July 4<sup>th</sup> and we're celebrating an old holiday, Independence Day. I think we're having baby back ribs, chicken and ground beef for the youngsters. If you're ever in our neck of the woods, stop in and say hey.

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